

### **SERVICE AGREEMENT NO. 4100**

### CONTRACT FOR PROFESSIONAL SERVICES

### FOR PROJECT 22023 - Wesley Seale Dewatering System and Spillway Gates Rehab

The City of Corpus Christi, a Texas home rule municipal corporation, P.O. Box 9277, Corpus Christi, Nueces County, Texas 78469-9277 (City) acting through its duly authorized City Manager or Designee (Director) and FREESE AND NICHOLS, INC., 800 N. Shoreline, Suite 1600N, Corpus Christi, Nueces, Texas 78401 (Consultant), hereby agree as follows:

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### ARTICLE I – SCOPE OF SERVICES

- 1.1 City and Consultant agree that the services provided are properly described in the Scope of Services, which is incorporated herein and attached to this Agreement as **Exhibit A**. The Scope of Services shall include all associated services required for Consultant to provide such Services, pursuant to this Agreement, and any and all Services that would normally be required by law or common due diligence in accordance with the standard of care defined in Article XIII of this Agreement. The approved Scope of Services defines the services to be performed by Consultant under this Agreement. Consultant will perform the Services in accordance with **Exhibit A** and with Consultant's response to the Request for Qualifications related to this project, which response is incorporated by reference into this Agreement as if set out here in its entirety.
- 1.2 Consultant shall follow City Codes and Standards effective at the time of the execution of the contract. At review milestones, the Consultant and City will review the progress of the plans to ensure that City Codes and Standards are followed unless specifically and explicitly excluded from doing so in the approved Scope of Services attached as **Exhibit A**. A request made by either party to deviate from City standards after the contract is executed must be in writing.
- 1.3 Consultant shall provide labor, equipment and transportation necessary to complete all services agreed to hereunder in a timely manner throughout the term of the Agreement. Persons retained by Consultant to perform work pursuant to this Agreement shall be employees or subconsultants of Consultant. Upon request, Consultant must provide City with a list of all subconsultants that includes the services performed by subconsultant and the % of work performed by subconsultant (in dollars). Changes in Consultant's proposed team as specified in the SOQ or Scope of Services must be agreed to by the City in writing.
- 1.4 Consultant shall not begin work on any phase/task authorized under this Agreement until they are briefed on the scope of the Project and are notified in writing to proceed. If the scope of the Project changes, either Consultant or City may request a review of the changes with an appropriate adjustment in compensation.
- 1.5 Consultant will provide monthly status updates (project progress or delays) in the format requested by the City with each monthly invoice.
- 1.6 <u>For design services</u>, Consultant agrees to render the professional services necessary for the advancement of the Project through Final Completion of the Construction Contract. Consultant acknowledges and accepts its responsibilities, as defined and described in City's General Conditions for Construction Contracts, excerpt attached as **Exhibit D**.
  - 1.6.1 The Consultant agrees to serve as the City's Designer as defined in the General Conditions and will consult and advise the City on matters related to the Consultant's Scope of Services during the performance of the Consultant's services.
  - 1.6.2 The Consultant agrees to prepare plans, specification, bid and contract documents and to analyze bids and evaluate the documents submitted by bidders.
  - 1.6.3 The Consultant agrees to assist the City in evaluating the qualifications of the prospective contractors, subcontractors and suppliers.
- 1.7 For projects that require subsurface utility investigation:
  - 1.7.1 The Consultant agrees to prepare and submit to the City prior to the 60% submittal a signed and sealed report identifying all utilities within the project area at the Quality Level specified in **Exhibits A** and **A-1**. It is assumed that all utilities will be identified using Quality Level A exploratory excavation unless stated otherwise.

- 1.7.2 Utilities that should be identified include but are not limited to utilities owned by the City, local franchises, electric companies, communication companies, private pipeline companies and 3<sup>rd</sup> party owners/operators.
- 1.8 For project with potential utility conflicts:
  - 1.8.1 The Consultant agrees to coordinate the verification and resolution of all potential utility conflicts.
  - 1.8.2 The Consultant agrees to prepare and submit a monthly Utility Coordination Matrix to the City.
- 1.9 The Consultant agrees to complete the Scope of Services in accordance with the approved project schedule and budget as defined in **Exhibit A**, including completing the work in phases defined therein.
- 1.10 The Consultant agrees to conduct all communication through and perform all project-related functions utilizing the City's project management system known as e-Builder. This includes all correspondence, submittals, payment requests and processing, contract amendments and construction phase activities.

### ARTICLE II - QUALITY CONTROL

- 2.1 The Consultant agrees to perform quality assurance-quality control/constructability reviews (QCP Review). The City reserves the right to retain a separate consultant to perform additional QCP services for the City.
- 2.2 The Consultant will perform QCP Reviews at intervals during the Project to ensure deliverables satisfy applicable industry quality standards and meet the requirements of the Project scope. Based on the findings of the QCP Review, the Consultant must reconcile the Project Scope and the Opinion of Probable Cost (OPC), as needed.
- 2.3 Final construction documents that do not meet City standards in effect at the time of the execution of this Agreement may be rejected. If final construction documents are found not to be in compliance with this Agreement, Consultant will not be compensated for having to resubmit documents.

### ARTICLE III - COMPENSATION

- 3.1 The Compensation for all services (Basic and Additional) included in this Agreement and in the Scope of Services for this Agreement shall not exceed \$2,053,094.00.
- 3.2 The Consultant's fee will be on a lump sum or time and materials (T&M) basis as detailed in **Exhibit A** and will be full and total compensation for all services and for all expenses incurred in performing these services. Consultant shall submit a Rate Schedule with their proposal.
- 3.3 The Consultant agrees to complete the Scope of Services in accordance with the approved project schedule and budget as defined in **Exhibit A**, including completing the work in phases defined therein.
- 3.4 The Director of Engineering Services may request the Consultant to undertake additional services or tasks provided that no increase in fee is required. Services or tasks requiring an increase of fee will be mutually agreed and evidenced in writing as an amendment to this contract. Consultant shall notify the City within three (3) days of notice if tasks requested requires an additional fee.
- 3.5 Monthly invoices will be submitted in accordance with the Payment Request as shown in **Exhibit B**. Each invoice will include the Consultant's estimate of the proportion of the contracted services completed at the time

of billing. For work performed on a T&M Basis, the invoice shall include documentation that shows who worked on the Project, the number of hours that each individual worked, the applicable rates from the Rate Schedule and any reimbursable expenses associated with the work. City will make prompt monthly payments in response to Consultant's monthly invoices in compliance with the Texas Prompt Payment Act.

- 3.6 Principals may only bill at the agreed hourly rate for Principals (as defined in the Rate Schedule) when acting in that capacity. Principals acting in the capacity of staff must bill at applicable staff rates.
- 3.7 Consultant certifies that title to all services covered by a Payment Request shall pass to City no later than the time of payment. Consultant further certifies that, upon submittal of a Payment Request, all services for which Payment Requests have been previously issued and payments received from City shall, to the best of Consultant's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of Consultant or other persons or entities making a claim by reason of having provided labor or services relating to this Agreement. Consultant shall indemnify and hold City harmless from any liens, claims, security interests or encumbrances filed by anyone claiming by, through or under the items covered by payments made by City to Consultant.
- 3.8 The final payment due hereunder shall not be paid until all reports, data and documents have been submitted, received, accepted and approved by City. Final billing shall indicate "Final Bill no additional compensation is due to Consultant."
- 3.9 City may withhold compensation to such extent as may be necessary, in City's opinion, to protect City from damage or loss for which Consultant is responsible, because of:
  - 3.9.1 delays in the performance of Consultant's work;
  - 3.9.2 failure of Consultant to make payments to subconsultants or vendors for labor, materials or equipment;
  - 3.9.3 damage to City; or
  - 3.9.4 persistent failure by Consultant to carry out the performance of its services in accordance with this Agreement.
- 3.10 When the above reasons for withholding are removed or remedied by Consultant, compensation of the amount withheld shall be made within 30 days. City shall not be deemed in default by reason of withholding compensation as provided under this Agreement.
- 3.11 In the event of any dispute(s) between the Parties regarding the amount properly compensable for any phase or as final compensation or regarding any amount that may be withheld by City, Consultant shall be required to make a claim pursuant to and in accordance with the terms of this Agreement and follow the procedures provided herein for the resolution of such dispute. In the event Consultant does not initiate and follow the claims procedures as required by the terms of this Agreement, any such claim shall be waived.
- 3.12 Request of final compensation by Consultant shall constitute a waiver of claims except those previously made in writing and identified by Consultant as unsettled at the time of final Payment Request.
- 3.13 All funding obligations of the City under this Agreement are subject to the appropriation of funds in its annual budget. The City may direct the Consultant to suspend work pending receipt and appropriation of funds. The right to suspend work under this provision does not relieve the City of its obligation to make payments in accordance with section 3.5 above for services provided up to the date of suspension.

### ARTICLE IV - TIME AND PERIOD OF SERVICE

- 4.1 This Agreement shall be effective upon the signature of the City Manager or designee (Effective Date).
- 4.2 The Consultant agrees to begin work on those authorized Services for this contract upon receipt of the Notice to Proceed from the Procurement Division. Work will not begin on any phase or any Additional Services until requested in writing by the Consultant and written authorization is provided by the Director of Engineering Services.
- 4.3 Time is of the essence for this Agreement. Consultant shall perform and complete its obligations under this Agreement in a prompt and continuous manner so as to not delay the Work for the Project, in accordance with the schedules approved by City. The Consultant and City are aware that many factors may affect the Consultant's ability to complete the services to be provided under this agreement. The Consultant must notify the City within ten business days of becoming aware of a factor that may affect the Consultant's ability to complete the services hereunder.
- 4.4 City shall perform its obligations of review and approval in a prompt and continuous manner so as to not delay the project.
- 4.5 This Agreement shall remain in force for a period which may reasonably be required for completion of the Project, including any extra work and any required extensions thereto, unless terminated as provided for in this Agreement. For construction design services, "completion of the Project" refers to acceptance by the City of the construction phase of the Project, i.e., Final Completion.

### ARTICLE V - OPINIONS OF COST

- 5.1 The Opinion of Probable Cost (OPC) is computed by the Consultant and includes the total cost for construction of the Project.
- 5.2 The OPC does not include the cost of the land, rights-of-way or other costs which are the responsibility of the City.
- 5.3 Since Consultant has no control over a construction contractor's cost of labor, materials or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, Consultant's opinions of probable Project Cost or Construction Cost provided herein are to be made on the basis of Consultant's experience and qualifications and represent Consultant's best judgment as a design professional familiar with the construction industry, but Consultant cannot and does not guarantee proposals, bids or the construction cost shall not vary from the OPC prepared by Consultant.

### ARTICLE VI – INSURANCE REQUIREMENTS

- 6.1 Consultant must not commence work under this Agreement until all insurance required has been obtained and such insurance has been approved by the City. Consultant must not allow any subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.
- 6.2 Insurance Requirements are shown in **EXHIBIT C**.

### ARTICLE VII - INDEMNIFICATION

Consultant shall fully indemnify and hold harmless the City of Corpus Christi and its officials,

officers, agents, employees, excluding the engineer or architect or that person's agent, employee or subconsultant, over which the City exercises control ("Indemnitee") from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, to the extent that the damage is caused by or results from an act of negligence, intentional tort, intellectual property infringement or failure to pay a subcontractor or supplier committed by Consultant or its agent, Consultant under contract or another entity over which Consultant exercises control while in the exercise of rights or performance of the duties under this agreement. This indemnification does not apply to any liability resulting from the negligent acts or omissions of the City or its employees, to the extent of such negligence.

Consultant shall defend Indemnitee, with counsel satisfactory to the City Attorney, from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, if the claim is not based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee. If a claim is based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee, the Consultant shall reimburse the City's reasonable attorney's fees in proportion to the Consultant's liability.

Consultant must advise City in writing within 24 hours of any claim or demand against City or Consultant known to Consultant related to or arising out of Consultant's activities under this Agreement.

### ARTICLE VIII - TERMINATION OF AGREEMENT

### 8.1 By Consultant:

- 8.1.1 The City reserves the right to suspend this Agreement at the end of any phase for the convenience of the City by issuing a written and signed Notice of Suspension. The Consultant may terminate this Agreement for convenience in the event such suspension extends for a period beyond 120 calendar days by delivering a Notice of Termination to the City.
- 8.1.2 The Consultant must follow the Termination Procedure outlined in this Agreement.

### 8.2 By City:

- 8.2.1 The City may terminate this agreement for convenience upon seven days written notice to the Consultant at the address of record.
- 8.2.2 The City may terminate this agreement for cause upon ten days written notice to the Consultant. If Consultant begins, within three days of receipt of such notice, to correct its failure and proceeds to diligently cure such failure within the ten days, the agreement will not terminate. If the Consultant again fails to perform under this agreement, the City may terminate the agreement for cause upon seven days written notice to the Consultant with no additional cure period. If the City terminates for cause, the City may reject any and all proposals submitted by Consultant for up to two years.

### 8.3 Termination Procedure

8.3.1 Upon receipt of a Notice of Termination and prior to the effective date of termination, unless the notice otherwise directs or Consultant takes action to cure a failure to perform under the cure period, Consultant shall immediately begin the phase-out and discontinuance of all services in connection with the performance of this Agreement. Within 30 calendar days after receipt of the Notice of Termination, unless Consultant has successfully cured a failure to perform, Consultant shall submit a statement

showing in detail the services performed under this Agreement prior to the effective date of termination. City retains the option to grant an extension to the time period for submittal of such statement.

- 8.3.2 Consultant shall submit all completed and/or partially completed work under this Agreement, including but not limited to specifications, designs, plans and exhibits.
- 8.3.3 Upon receipt of documents described in the Termination Procedure and absent any reason why City may be compelled to withhold fees, Consultant will be compensated for its services based upon a Time & Materials calculation or Consultant and City's estimate of the proportion of the total services actually completed at the time of termination. There will be no compensation for anticipated profits on services not completed.
- 8.3.4 Consultant acknowledges that City is a public entity and has a duty to document the expenditure of public funds. The failure of Consultant to comply with the submittal of the statement and documents, as required above, shall constitute a waiver by Consultant of any and all rights or claims to payment for services performed under this Agreement.

### ARTICLE IX – RIGHT OF REVIEW AND AUDIT

- 9.1 Consultant grants City, or its designees, the right to audit, examine or inspect, at City's election, all of Consultant's records relating to the performance of the Work under this Agreement, during the term of this Agreement and retention period herein. The audit, examination or inspection may be performed by a City designee, which may include its internal auditors or an outside representative engaged by City. Consultant agrees to retain its records for a minimum of four years following termination of the Agreement, unless there is an ongoing dispute under this Agreement, then such retention period shall extend until final resolution of the dispute.
- 9.2 Consultant's records include any and all information, materials and data of every kind and character generated as a result of and relevant to the Work under this Agreement (Consultant's Records). Examples include billings, books, general ledger, cost ledgers, invoices, production sheets, documents, correspondence, meeting notes, subscriptions, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, reports, drawings, receipts, vouchers, memoranda, time sheets, payroll records, policies, procedures, and any and all other agreements, sources of information and matters that may, in City's and Consultant's reasonable judgment, have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Agreement Documents.
- 9.3 City agrees that it shall exercise the right to audit, examine or inspect Consultant's Records only during Consultant's regular business hours. Consultant agrees to allow City's designee access to all of Consultant's Records, Consultant's facilities and Consultant's current employees, deemed necessary by City or its designee(s), to perform such audit, inspection or examination. Consultant also agrees to provide adequate and appropriate work space necessary to City or its designees to conduct such audits, inspections or examinations.
- 9.4 Consultant shall include this audit clause in any subcontractor, supplier or vendor contract.

### ARTICLE X – OWNER REMEDIES

- 10.1 The City and Consultant agree that in the event the City suffers actual damages, the City may elect to pursue its actual damages and any other remedy allowed by law. This includes but is not limited to:
  - 10.1.1 Failure of the Consultant to make adequate progress and endanger timely and successful completion of the Project, which includes failure of subconsultants to meet contractual obligations;

- 10.1.2 Failure of the Consultant to design in compliance with the laws of the City, State and/or federal governments, such that subsequent compliance costs exceed expenditures that would have been involved had services been properly executed by the Consultant.
- 10.1.3 Losses are incurred because of errors and/or omissions in the design, working drawings, specifications or other documents prepared by the Consultant to the extent that the financial losses are greater than the City would have originally paid had there not been errors and/or omissions in the documents.
- 10.2 When the City incurs non-value added work costs for change orders due to design errors and/or omissions, the City will send the Consultant a letter that includes:
  - (1) Summary of facts with supporting documentation;
  - (2) Instructions for Consultant to revise design documents, if appropriate, at Consultant's expense;
  - (3) Calculation of non-value added work costs incurred by the City; and
  - (4) Deadline for Consultant's response.
- 10.3 The Consultant may be required to revise bid documents and re-advertise the Project at the Consultant's sole cost if, in the City's judgment, the Consultant generates excessive addenda, either in terms of the nature of the revision or the actual number of changes due to the Consultant's errors or omissions.
- 10.4 The City may withhold or nullify the whole or part of any payment as detailed in Article III.

### ARTICLE XI – CONSULTANT REMEDIES

- 11.1 If Consultant is delayed due to uncontrollable circumstances, such as strikes, riots, acts of God, national emergency, epidemics, acts of the public enemy, governmental restrictions, laws or regulations or any other causes beyond Consultant's and City's reasonable control, an extension of the Project schedule in an amount equal to the time lost due to such delay shall be Consultant's sole and exclusive remedy. The revised schedule should be approved in writing with a documented reason for granting the extension.
- 11.2 The City agrees that the Consultant is not responsible for damages arising from any cause beyond Consultant's reasonable control.
- 11.3 If Consultant requests a remedy for a condition not specified above, Consultant must file a Claim as provided in this Agreement.

### ARTICLE XII – CLAIMS AND DISPUTE RESOLUTION

### 12.1 Filing of Claims

- 12.1.1 Claims arising from the circumstances identified in this Agreement or other occurrences or events, shall be made by Written Notice delivered by the party making the Claim to the other party within 21 calendar days after the start of the occurrence or event giving rise to the Claim and stating the general nature of the Claim.
- 12.1.2 Every Claim of Consultant, whether for additional compensation, additional time or other relief, shall be signed and sworn to by a person authorized to bind the Consultant by his/her signature, verifying the truth and accuracy of the Claim.
- 12.1.3 The responsibility to substantiate a claim rests with the party making the Claim.

- 12.1.4 Within 30 calendar days of receipt of notice and supporting documentation, City will meet to discuss the request, after which an offer of settlement or a notification of no settlement offer will be sent to Consultant. If Consultant is not satisfied with the proposal presented, Consultant will have 30 calendar days in which to (i) submit additional supporting data requested by the City, (ii) modify the initial request for remedy or (iii) request Mediation.
- 12.1.5 Pending final resolution of a claim, except as otherwise agreed in writing, Consultant shall proceed diligently with performance of the Agreement, and City shall continue to make payments in accordance with this Agreement.

### 12.2 Mediation

- 12.2.1 All negotiations pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations for purposes of applicable rules of evidence.
- 12.2.2 Before invoking mediation, the Parties agree that they shall first try to resolve any dispute arising out of or related to this Agreement through discussions directly between those senior management representatives within their respective organizations who have overall managerial responsibility for similar projects. This step shall be a condition precedent to the use of mediation. If the parties' senior management representatives cannot resolve the dispute within 30 calendar days after a Party delivers a written notice of such dispute, then the Parties shall proceed with the mediation process contained herein.
  - 12.2.2.1 In the event that City or Consultant shall contend that the other has committed a material breach of this Agreement, the Party alleging such breach shall, as a condition precedent to filing any lawsuit, request mediation of the dispute.
  - 12.2.2.2 Request for mediation shall be in writing, and shall request that the mediation commence no less than 30 or more than 90 calendar days following the date of the request, except upon agreement of both parties.
  - 12.2.2.3 In the event City and Consultant are unable to agree to a date for the mediation or to the identity of the mediator or mediators within 30 calendar days of the request for mediation, all conditions precedent in this Article shall be deemed to have occurred.
  - 12.2.2.4 The parties shall share the mediator's fee. Venue for mediation shall be Nueces County, Texas. Any agreement reached in mediation shall be enforceable as a settlement agreement in any court having jurisdiction thereof. No provision of this Agreement shall waive any immunity or defense. No provision of this Agreement is a consent to suit.
- 12.3 In calculating the amount of any Claim or any measure of damages for breach of contract, the following standards shall apply both to claims by Consultant and to claims by City:
  - 12.3.1 In no event shall either Party be liable, whether in contract or tort or otherwise, to the other Party for loss of profits, delay damages or for any special incidental or consequential loss or damage of any nature arising at any time or from any cause whatsoever;
  - 12.3.2 Damages are limited to extra costs specifically shown to have been directly caused by a proven wrong for which the other Party is claimed to be responsible.
- 12.4 In case of litigation between the parties, Consultant and City agree that neither party shall be responsible for payment of attorney's fees pursuant to any law or other provision for payment of attorneys' fees. Both Parties expressly waive any claim to attorney's fees should litigation result from any dispute between the parties to this

### Agreement.

- 12.5 In case of litigation between the parties, Consultant and City agree that they have knowingly waived and do hereby waive the right to trial by jury and have instead agreed, in the event of any litigation arising out of or connected to this Agreement, to proceed with a trial before the court, unless both parties subsequently agree otherwise in writing.
- 12.6 No Waiver of Governmental Immunity. This Agreement is to perform a governmental function solely for the public benefit. Nothing in this Agreement shall be construed to waive City's governmental immunity from lawsuit, which immunity is expressly retained to the extent it is not clearly and unambiguously waived by state law.

### ARTICLE XIII - MISCELLANEOUS PROVISIONS

13.1 <u>Assignability</u>. Neither party will assign, transfer or delegate any of its obligations or duties under this Agreement contract to any other person and/or party without the prior written consent of the other party, except for routine duties delegated to personnel of the Consultant staff. This includes subcontracts entered into for services under this Agreement. If the Consultant is a partnership or joint venture, then in the event of the termination of the partnership or joint venture, this contract will inure to the individual benefit of such partner or partners as the City may designate. No part of the Consultant fee may be assigned in advance of receipt by the Consultant without written consent of the City.

The City will not pay the fees of expert or technical assistance and consultants unless such employment, including the rate of compensation, has been approved in writing by the City.

- 13.2 <u>Provisions Required by Law</u>. Each applicable provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were physically included herein.
- 13.3 <u>Public Information</u>. The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract and the Consultant agrees that the contract can be terminated if the Consultant knowingly or intentionally fails to comply with a requirement of that subchapter.
- 13.4 <u>Standard of Care</u>. Services provided by Consultant under this Agreement shall be performed with the professional skill and care ordinarily provided by competent licensed professionals practicing under the same or similar circumstances and professional license; and performed as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.
- 13.5 <u>Licensing</u>. Consultant shall be represented by personnel with appropriate licensure, registration and/or certification(s) at meetings of any official nature concerning the Project, including scope meetings, review meetings, pre-bid meetings and preconstruction meetings.
- 13.6 <u>Independent Contractor</u>. The relationship between the City and Consultant under this Agreement shall be that of independent contractor. City may explain to Consultant the City's goals and objectives in regard to the services to be performed by Consultant, but the City shall not direct Consultant on how or in what manner these goals and objectives are to be met.
- 13.7 <u>Entire Agreement</u>. This Agreement represents the entire and integrated Agreement between City and Consultant and supersedes all prior negotiations, representations or agreements, either oral or written. This Agreement may be amended only by written instrument signed by both the City and Consultant.

- 13.8 <u>No Third Party Beneficiaries</u>. Nothing in this Agreement can be construed to create rights in any entity other than the City and Consultant. Neither the City nor Consultant intends to create third party beneficiaries by entering into this Agreement.
- 13.9 <u>Disclosure of Interest</u>. Consultant agrees to comply with City of Corpus Christi Ordinance No. 17112 and complete the *Disclosure of Interests* form.
- 13.10 <u>Certificate of Interested Parties</u>. For contracts greater than \$50,000, Consultant agrees to comply with Texas Government Code section 2252.908 and complete Form 1295 Certificate of Interested Parties as part of this agreement. Form 1295 must be electronically filed with the Texas Ethics Commission at <a href="https://www.ethics.state.tx.us/whatsnew/elf\_info\_form1295.htm">https://www.ethics.state.tx.us/whatsnew/elf\_info\_form1295.htm</a>. The form must then be printed, signed and filed with the City. For more information, please review the Texas Ethics Commission Rules at <a href="https://www.ethics.state.tx.us/legal/ch46.html">https://www.ethics.state.tx.us/legal/ch46.html</a>.
- 13.11 <u>Conflict of Interest</u>. Consultant agrees, in compliance with Chapter 176 of the Texas Local Government Code, to complete and file Form CIQ with the City Secretary's Office. For more information and to determine if you need to file a Form CIQ, please review the information on the City Secretary's website at http://www.cctexas.com/government/city-secretary/conflict-disclosure/index.
- 13.11 <u>Title VI Assurance</u>. The Consultant shall prohibit discrimination in employment based upon race, color, religion, national origin, gender, disability or age.
- 13.12 <u>Controlling Law</u>. This Agreement is governed by the laws of the State of Texas without regard to its conflicts of laws. Venue for legal proceedings lies exclusively in Nueces County, Texas. Cases must be filed and tried in Nueces County and cannot be removed from Nueces County.
- 13.13 <u>Severability</u>. If, for any reason, any one or more Articles and/or paragraphs of this Agreement are held invalid or unenforceable, such invalidity or unenforceability shall not affect, impair or invalidate the remaining Articles and/or paragraphs of this Agreement but shall be confined in its effect to the specific Article, sentences, clauses or parts of this Agreement held invalid or unenforceable, and the invalidity or unenforceability of any Article, sentence, clause or parts of this Agreement, in any one or more instance, shall not affect or prejudice in any way the validity of this Agreement in any other instance.
- 13.14 <u>Conflict Resolution Between Documents</u>. Consultant hereby agrees and acknowledges if anything contained in the Consultant-prepared **Exhibit A**, Consultant's Scope of Services, the Consultant's response to the Request for Qualifications related to this project, or in any other document prepared by Consultant and included herein, is in conflict with Articles I-XIII of this Agreement (Articles), the Articles shall take precedence and control to resolve said conflict.

[Signature Page Follows]

CITY OF CORPUS CHRISTI		FREESE AND NICHOLS, INC.	
Jeff Edmonds, P.E. Director of Engineering Service	Date	Ron Guzman, P.E. 800 N. Shoreline, Suite 1600N Corpus Christi, TX 78401 (361) 561-6500 Office (361) 651-6501 Fax rg@freese.com	Date
APPROVED AS TO LEGAL F	FORM:		
Assistant City Attorney	Date	Authorize	ed By
ATTEST		Council	

Date

City Secretary

www.freese.com

February 9, 2022

Mr. Jeff Edmonds, P.E. Director of Engineering Services City of Corpus Christi P.O. Box 9277 Corpus Christi, TX 78469

RE: Proposal for Engineering Services for Wesley E. Seale Dam Dewatering System and Spillway Gates Rehab, Project No. 22023

Dear Mr. Edmonds:

Freese and Nichols, Inc. (FNI) is pleased to submit this professional services proposal as the basis for a lump sum engineering services contract. This effort will consist of engineering services to support the City of Corpus Christi's (City's) rehabilitation of the existing spillway gates and design of a new dewatering system for both the service (South) and emergency (North) spillways.

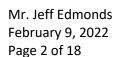
### Background

Wesley E. Seale Dam original construction was completed in 1958, and it impounds over 250,000 acre-feet of our water supply. The dam is classified a large high hazard dam by the Texas Commission on Environmental Quality (TCEQ). The dam consists of three earth embankment sections and two 40-foot-high Ambursen, flat-slab-and-buttress spillways that accommodate 60 gates.

A gate seals evaluation report was prepared in 2010. The report found that the gate seals had undergone several partial repair efforts in the 1990's. The report stated that many bolts on the existing seal system were missing, and that the condition of the seals was such that full replacement of the seal system was recommended. The report also indicated that the gate seals were an outdated type not supported for repair and the gates and piers would require modifications to accept a modern seal system when they were replaced.

An inspection of Wesley E. Seale Dam was performed in March of 2017. From the 2017 inspection, it was noted that rust blisters are present on the upstream face of the gates, side seal leakage and general seal deterioration continue to worsen, and general corrosion of the gates was noted. A review of existing records demonstrated that the gates were last rehabilitated and recoated approximately 25 years ago. It is typical to recoat metal facilities structures every 10-15 years. The inspection identified the need to develop a rehabilitation program for both the South and North spillway crest gates. Recommended work includes gate replacement and/or repairs to corroded structural members, replacing missing bolts, recoating of the gates, rehabilitation of lifting gear or lifting bars, and modernization and replacement of the seals.

A dewatering system to allow for maintenance of the gates and individual spillways is not available at the site. A previous system was deemed difficult to operate and abandoned. Therefore, a dewatering alternatives report was prepared in 2018 to evaluate improvement options. The report made recommendations and provided design concepts for a new dewatering system at the dam to facilitate maintenance of the existing





spillway crest gates, as it is currently not possible to efficiently and effectively individually isolate each of the 60 gates. The recommended dewatering system consists of a mobile stoplog system. This system will utilize a movable gantry crane on the spillways to support stoplog deployment at the 27 South spillway crest gates as well as the 33 North spillway crest gates. The recommended dewatering system will require modifications to the bridge decks and piers.

### **Project Understanding**

The City has requested to move forward with the replacement of the crest gates and lift bars and the addition of the mobile stoplog deployment system at the North and South spillways. The following paragraphs include a brief discussion of the project phasing and schedule per discussions with the City, primarily based on fiscal year budgeting purposes.

### A. Dewatering System

The dewatering system is to be constructed in two phases, with the first phase being construction at the South spillway. The second phase, the North spillway dewatering system, is recommended to be bid as an additive alternate to give budgetary options to the City. Should budget not be available to perform the second phase at the time of the initial bid, this phasing approach would provide an opportunity to incorporate lessons learned from the South spillway dewatering system construction into the North spillway dewatering design. The City could then bid the North spillway dewatering system bid set while the South spillway contractor is still on site. With the contractor still on site, there would be an opportunity for savings on mobilization and demobilization on the next phase of the work.

For this scope of work, it is assumed that the South and North spillway dewatering systems will be performed under a single construction contract. If the second phase done separately, bid phase services for the second phase would be performed as an additional service.

### B. Spillway Gate Replacement

For the spillway crest gate rehabilitation, it is necessary to have the new dewatering system in place prior to this work. The City's preference is to have ten (10) new crest gates fabricated and ready to be installed once the South spillway dewatering system is operational. It is understood that the replacement of the remaining crest gates, moving from south to north, would occur over the next five years, with 10 gates being fabricated and installed each year. The north spillway dewatering system will need to be in place by the time the 3<sup>rd</sup> set of ten (10) gates is procured. This approach would also allow for the incorporation of lessons learned into the subsequent gate replacement contracts and for potential mobilization and demobilization cost savings should the initial contractor wish to bid on subsequent contracts. Bid phase services will be required for each set of ten (10) gates to be rehabilitated, and will be performed as an additional service.

After replacing the initial ten (10) gates, FNI will perform an evaluation, in consultation with the City, to determine the requirements and the best strategies to replace the remaining 50 gates. This evaluation will be performed after a detailed inspection upon removal of the existing gates during the replacement of the first set of ten (10) gates. If any change in approach is required by the City, FNI will change the approach in the second set of contract documents. The design will be in line with recommendations developed in the spillway gate evaluation report, as discussed below. Any gate rehabilitation design effort (vs. replacement) would be performed as an additional service.

The following sections present a more detailed narrative of the services to be provided by FNI.

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### **BASIC SERVICES**

### **Project Management**

Establish a schedule, coordinate information between FNI and the City, and other efforts in support of this project. Coordinate Quality Control (QC)/Quality Assurance (QA) by Senior Management and Technical Staff consistent with FNI's established internal quality review processes. Coordinate conference calls for the internal kickoff meetings, client kickoff meetings, and monthly progress meetings, coordinate site visits and meetings with the City. Develop and provide monthly status reporting, including project financial information.

### Survey

Based on original design drawings, the bays and piers at both the South and North spillways were constructed to the same overall dimensions. This will need to be confirmed prior to design development of both the new dewatering system and spillway gate designs. Surveys will be performed at six gates along the South spillway and seven gates along the North spillway, matching the gates that will be inspected as part of the close-up visual examination (discussed later in this scope). The survey will focus on spillway bay and pier dimensions, crest elevations, and wall plumbness.

Topographic survey of the spillway bridges, piers, gates, and other appurtenances will also be performed in order to design the improvements required for both spillway gates and dewatering. Topographic Survey of existing and proposed instrumentation system component locations will also be performed.

### **Spillway Dewatering System Final Design**

Wesley Seale Dam does not currently have a system in place to dewater the spillway crest gates for maintenance and repairs. Dewatering system options for future design development and construction to facilitate required maintenance projects, including recoating of the spillway gates and seal replacement, were developed in a preliminary design report in 2018. A floating bulkhead system and a spillway-mounted mobile deployment system were studied in the conceptual analysis. Based on the report, the City decided to move forward with a spillway-mounted system that can be deployed in a flowing water emergency condition. This effort focuses on the design and construction documents to procure this system.

The designs for the South and North spillways will be similar. Variations between the two spillways primarily consist of differences in overall length and the presence of the outlet tower at the South spillway right abutment. FNI will render the following professional services for this effort:

### Preliminary Design (Basis for Physical Hydraulic Model Study):

Preliminary design drawings will be developed to provide Utah Water Research Laboratory (UWRL) with necessary details to design and construct the dewatering system for the physical model study. Specific tasks will include:

- 1. Develop preliminary design designs as necessary to model the dewatering system at the UWRL. The design will address stoplogs, buttress modifications, and protective enclosure for gate lifting arms.
- 2. Develop design criteria for the physical model study.

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- 3. Develop a 30% design submittal. The 30% submittal will include drawing details to be provided to UWRL. Provide the documents to the City in electronic format (PDF) for review and comment.
- 4. Participate in a review session with City staff to discuss the 30% design submittal.

### Permitting

Section 404 of the Clean Water Act – Repairs/improvements to the dam structure would likely result in regulated discharges of fill within Waters of the US (WOTUS). The discharge of fills within WOTUS is regulated under Section 404 of the Clean Water Act by the US Army Corps of Engineers (USACE). Based on FNI's current understanding of the proposed work, it is assumed that repairs and improvements to the dam would be authorized by Nationwide Permit (NWP) 3 (for Maintenance Activities) without notification to USACE. FNI would review the proposed design to confirm the project could proceed with NWP 3 without USACE notification in a technical memorandum. No USACE coordination is included with this effort since it is assumed that USACE notification will not be required.

Endangered Species Act — as part of compliance with NWP 3, FNI would also document the project's potential effect to federally-listed species. It is assumed the project would result in no effect to federally listed species and no US Fish and Wildlife Service coordination is included in this task. Project effect determinations to federally listed species would be documented in a technical memorandum.

Section 106 of the Historic Preservation Act - as part of compliance with NWP 3, FNI would also document the project's potential effect to historic structures (Wesley Seale Dam is over 50 years old). This effort would include a desktop review of historic resources in the project area and a letter would be submitted to Texas Historical Commission for either concurrence of no effect, or directive on additional survey efforts. This task assumes only a desktop review and submission of a letter to THC; if more in-depth surveys or analysis is required, then that effort would be an additional service.

Texas Parks and Wildlife Department's (TWPD) Aquatic Resource Relocation Permit (ARRP) — Repairs/improvements to the dam may require dewatering and construction of a temporary cofferdam. In the event that a cofferdam is required, any aquatic resources (such as fish and freshwater mussels) would need to be relocated into the lake to avoid impacts to state aquatic resources. FNI would obtain a TWPD ARRP to perform the relocation activity and document results in a technical memorandum.

### Physical Model Study

Because of the nature of flowing fluid, it is difficult to accurately predict the hydrodynamic performance of control structures and the magnitude of the loads imposed on such structures. A physical model of the spillway and dewatering system will be developed to evaluate loads and operational performance of the deployment of the stoplogs under varying headwater levels for still water conditions and flowing water conditions. A sectional scaled model will be used that incorporates a full gate bay, including a gate, two piers, and stoplogs. The model will be equipped with a hoisting mechanism that will be attached to load cells on cables that will be used to measure the loading as the dewatering system is deployed in either static or dynamic conditions.

Once the physical model is completed and tested by UWRL, FNI, and City personnel, if available, will participate in an on-site and/or video performance evaluation. Performance results will be evaluated and minor geometric revisions, if required, will be recommended. A summary report documenting the assumptions, methodology, findings, and conclusions of the physical model study will be developed. Results



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of the physical model study will be used in the design of the pier modifications and stoplog dewatering system.

### <u>Detailed Design of Pier and Deck Modifications</u>

This task includes the design of pier and deck modifications at the North and South spillway to accommodate the stoplog dewatering system. Design development shall consider the results of physical modeling of the spillway performed by UWRL. The design will include the following specific tasks:

- 1. Evaluation and incorporation of field survey measurements and survey data.
- 2. Stoplog guide rail design (concrete demolition, seal concepts, anchorage, and coordination with existing surfaces).
- 3. Spillway bridge deck load rating development.
- 4. Modifications to the existing spillway bridge decks including removal of the center portion of bridge deck and installation of additional supports.
- 5. Design of grating to cover the center portion of the bridge deck.
- 6. Evaluation of existing instrumentation and electrical conduit locations relative to demolition and construction of the dewatering system, as well as any redesign or relocation required.
- 7. Revision of pier modifications per findings from the UWRL model study.

### <u>Detailed Design of Stoplog Dewatering Systems for North and South Spillways</u>

This task includes the design of stoplog dewatering systems for the North and South spillways. Design development shall consider the results of physical modeling of the spillway performed by UWRL. The design will include the following specific tasks:

- 1. Evaluation and incorporation of field measurements and survey data.
- 2. Development of final system geometry and dimensions (structural weight, wheel design, side seals, bottom seals, interlocking connections, and bottom log support). This effort will include coordination with existing structures and concurrent modifications to the spillway piers.
- 3. Finite-element modeling on critical portions of the stoplogs.
- 4. Discussions with potential vendors of seals, structural steel, anchorage, wheels, and hoists.
- 5. Design a dogging system for permanent storage of the stoplogs.
- 6. Evaluation of stoplog deployment/delivery constraints.
- 7. Revision of the dewatering system per findings from the UWRL model study.

### <u>Detailed Design of Stoplog Deployment Systems for North and South Spillways</u>

This task includes the design of the stoplog deployment system for the North and South spillway. The deployment system will consist of a gantry crane, hoist system, and guide rails. The deployment system design effort will consist of developing the technical performance requirements for the gantry crane and hoist. The design will include the following specific tasks:

1. Develop electrical design and upgrades to the spillway to provide power for the deployment system.

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2. Develop technical performance specifications for a gantry crane and hoist that covers general requirements, quality control, required submittals, materials, electrical and mechanical components, metal fabrication, protective coatings, shop testing, delivery, measurement, and payment.

### **Dewatering Construction Drawings and Specifications**

The construction drawings will serve as the basis for the preparation of quantity estimates, opinion of probable construction cost, technical specifications, and contract bid documents for use during construction.

Technical specifications will be prepared to describe the scope, materials, standards, and procedures to which the work is to be performed for rehabilitation. The technical specifications will be prepared as soon as the rehabilitation designs and drawings are advanced to a stage that provides an accurate description of the work involved. Environmental protection requirements will be included to make bidders aware of the measures to be taken to meet air, noise, and water quality regulations. The technical specifications will include the requirements for furnishing materials and execution of the work, including temporary scaffolding, containment, and supports during rehabilitation. The technical specifications along with the instructions to bidders, general conditions, special conditions, bid forms, bid schedule, design drawings, and reference drawings will form the final contract bid package.

The following specific tasks will be completed to develop the construction drawings and specifications for the **South spillway dewatering system**:

### <u>60% Design</u>:

- 1. Develop 60% level design drawings based on the results of the physical model study and detailed design of the dewatering components as discussed above.
- 2. Develop 60% level technical specifications and coordinate with the design drawings so that all items of work and materials are covered in the specifications and compatible with notes on the drawings.
- 3. Prepare 60% design submittal. The 60% submittal will include plans, technical specifications, front-end documents, and a preliminary opinion of probable construction costs (OPCC). Provide the documents to the City in electronic format (PDF) for review and comment.
- 4. Participate in a review session with City staff to discuss the 60% design submittal.
- 5. Coordinate and participate in meeting with TCEQ Dam Safety to discuss the design and 60% drawings.

### Pre-Final (90%) and Final Design:

- 1. Develop the pre-final design, including the addressing of City formal review comments from the 60% design submittal. The Pre-Final submittal will include plans, technical specifications, and up-to-date front-end documents. Provide the documents to the City in electronic format (PDF) for review and comment.
- 2. Prepare a revised OPCC for the proposed improvements based on pre-final submittal.
- 3. Participate in a review session with City staff to discuss the pre-final design submittal.

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- 4. Address any final comments from the pre-final design submittal and prepare a signed/sealed (IFB) set for submittal to the City for bid.
- 5. Submit IFB construction documents to TCEQ Dam Safety for final approval.

During construction of the dewatering system at the South spillway, drawings and specifications will be developed for the North spillway. The South spillway drawings will be modified to account for the difference in overall spillway length compared to the North spillway and the differences in abutment configurations. In addition, lessons learned from the South spillway construction, if any, will be incorporated into the design.

The following specific tasks will be completed to develop the construction drawings and specifications for the **North spillway dewatering system**:

### Pre-Final (90%) and Final Design:

- 1. Develop the pre-final design by incorporating the geometric changes between the South and North spillways. The Pre-Final submittal will include plans, technical specifications, and up-to-date front-end documents. Provide the documents to the City in electronic format (PDF) for review and comment.
- 2. Develop a revised OPCC for the North spillway dewatering system based on prefinal submittal.
- 3. Participate in a review session with City staff to discuss the pre-final design submittal.
- 4. Address any final comments from the pre-final design submittal and prepare a signed/sealed (IFB) set for submittal to the City for bid.
- 5. Submit IFB construction documents to TCEQ Dam Safety for review and approval.

### **Existing Spillway Gate System Evaluation**

The spillway gate system evaluation will entail a close-up visual examination of six (6) gates along the South spillway and seven gates (7) along the North spillway. The number of gates selected at each spillway is considered to be appropriate for representing the condition of the entirety of all of the spillway gates. The examination will be performed by engineers with proper equipment to access the gates and perform a visual examination of the condition of structural members, connections, bolts, and welds.

An examination plan, including a gate examination form with checklists for the representative gates, will be prepared for use during the field examination for the evaluation of the various structural members and components. During the field examination, the condition of structural members, connections, welds, bolts, and seals will be visually examined, recorded and photographed. The extent of visible corrosion will be estimated and evaluated. If significant deficiencies are found, further field, laboratory or nondestructive testing may be recommended and/or performed.

After completion of the inspection, a finite-element model will be constructed to document the structural capacity of the existing gate components compared to current design standards and to inform final design of the new gates. Following completion of the above tasks, a draft report will be prepared to document the gate examination findings, condition of the gates and results of structural analyses. The report will provide conclusions and recommendations for required maintenance and repairs/strengthening as part of the new design, if required. Any significant deterioration or deficiencies based on inspection or modeling that appear to require immediate action will be brought to the attention of City personnel.



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The following describes the above tasks in greater detail:

### **Gate Inspection**

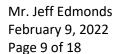
The following tasks will be performed during the visual examination of the spillway gates performed by engineers in order to assess the condition of the structural members to be reused, such as connections, bolts, and welds:

- 1. Prepare a customized gate examination form with checklists for each gate, that will be used to evaluate the various structural members and components. During the field examination, the condition of structural members, connections, welds, bolts, and seals will be visually examined, recorded and photographed.
- 2. Evaluate the gates by looking for corrosion along members and at connections. Visually inspect welds for cracks and corrosion. Visually inspect bolts for corrosion and tightness. If extensive corrosion is found, ultrasonic nondestructive testing may be performed to measure remaining member thicknesses.
- 3. Evaluate the skin plate for corrosion.
- 4. Evaluate each lifting assembly on the gate by observing existing conditions of the various components including the gate lifting arms, stem blocks, stems, stem block guides, and connections to the gate.
- 5. Observe the condition of the accessible and visible portions of the seals and mounting hardware. Observe accessible and visible portions of the bottom sill hinge and mounting hardware and check for deterioration of grout and corrosion, pitting or wear of metal.
- 6. Evaluate the condition of bumper blocks and visible portions of anchors.
- 7. Evaluate conditions of coatings.
- 8. If necessary, select areas or members for possible sampling of materials for testing.
- 9. Participate in debrief by conference call with City to discuss inspection observations and findings.
- 10. Prepare a gate inspection memorandum documenting the observations and findings from the inspection with field notes and photographs.

### **Structural Analysis**

It is recommended to perform a structural analysis of the gates in accordance with the United States Army Corps of Engineers (USACE) guidelines. The analysis will be used to assess the capacity of the existing gates against current industry standard criteria. The structural analysis of the gates will include the following specific tasks:

- 1. Develop a structural analysis model of one representative gate using a 3D finite element structural model developed using the STAAD-Pro computer program. The model will incorporate critical findings of gate examinations where appropriate.
- 2. Check the 3D analysis with independent hand calculations.
- 3. Evaluate stresses for the load cases currently specified by the United States Corps of Engineers (USACE) design guidelines [ETL 1110-2-584 "Design of Hydraulic Steel Structures].
- 4. Calculate the stresses in each gate member including the arms, bracing, horizontal girders and connections using the computer structural model. Evaluate the strength capacity of each member in accordance with Chapter H of the AISC Manual of Steel Construction, Allowable Stress Design, 14th Edition, which compares total actual stress to allowable stress for combined axial load and biaxial bending.





- 5. Evaluate gate performance for gate hinge friction coefficients of 0.15 and 0.30 to account for varying degrees of corrosion of the pins and bushings.
- 6. Determine if any of the gate members or connections fail to meet current code requirement for the various loading conditions.
- 7. Develop documentation of the structural analysis.

### Replacement Design Assessment and Report

Upon completion of the inspection and structural analysis, required replacement measures will be defined. This effort will include:

- 1. Perform preliminary modeling of replacement measures.
- 2. Develop opinion of probable project costs for gate replacement.

### **Evaluation Report**

A report will be developed to document the spillway gate and hoist evaluation. The report will include the following:

- 1. Field observations and data collected.
- 2. Structural analysis model development, analysis, and results.
- 3. Discussion of areas or components that require maintenance, repair, adjustment or modification.
- 4. Discussion of components that need to be replaced or renewed.
- 5. Discussion of opinion of probable project costs for replacement of the gates.
- 6. Discussion of gate control procedures.
- 7. Appendices including photographs.

Submit five (5) copies of the draft report to the City for review and schedule a meeting with the City to discuss the findings, conclusions, and recommendations.

Incorporate comments from the City and prepare and submit five (5) hard copies and one (1) electronic copy in PDF format (contained on a CD or flash drive) of the final report.

Deliverables will include the following:

• A draft and final report documenting the observations and findings from the inspections, condition assessments of the gates, structural analysis and conclusions and recommendations for replacement of the spillway gates.

### **New Spillway Gate Design**

It is understood that the City would like to initially procure 10 new gates to replace 10 existing gates. Under this task, the design of new gates will be performed, along with the preparation of contract documents for furnishing and installation of the gates. Based on original design and record drawings, all 60 of the existing gates were shown to be fabricated to the same dimensions to fit within spillway bays constructed of equal widths across both spillways. Therefore, one design will be developed for all of the new gates. It is understood that the gates at the North spillway were reconstructed in the 1990's such that the top of the gates are 6



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inches higher than the top of the gates at the South spillway; this elevation difference will remain with the new gates.

At this time, major structural modifications or repairs to the spillway piers or ogee are not anticipated. Minor structural revisions to accept the new gates, if necessary, will be depicted on the drawings. It is assumed that the new bottom hinges will be included in the design, all material will be removed down to existing concrete, and that existing embedded hinge anchorage can be reused, provided that the hinges are tested and approved for reuse during construction. The capacity of all of the existing embedded anchorages (i.e., 2 hinges per gate) will be proof tested to the loads required for safe operation during the construction phase and prior to new gate installation. The required loads will be determined based on structural analyses. The results of the inspection and load testing will be documented with a testing and inspection memorandum during construction as discussed in the sections below. Failed hinges and/or concrete anchorage requiring additional design and construction will be an additional service.

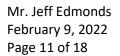
The new gate design will include details to connect to the new gate lifting arms. The lifting arms are attached to gate stems and are operated by hoists mounted atop the piers. It is assumed that the existing stem block guides, stems, and hoists will be re-used. These assumptions will be confirmed during the close-up field inspection of the gates and equipment as described above.

### **Structural Analysis**

Structural analysis of the gates will be performed in accordance with the United States Army Corps of Engineers (USACE) guidelines. The analysis will be used to assess the capacity of the existing gates against current industry standard criteria. The structural analysis of the gates will be used to determine the load demands required for the anchorage and will be used to determine the loads that will be used for proof testing of the anchorage. Structural analysis will include the following specific tasks:

- 1. Develop a structural analysis model of one representative gate using a 3D finite element structural model developed using the STAAD-Pro computer program. The model will incorporate critical findings of gate examinations where appropriate.
- 2. Check the 3D analysis with independent hand calculations.
- 3. Evaluate stresses for the load cases currently specified by the United States Corps of Engineers (USACE) design guidelines [ETL 1110-2-584 "Design of Hydraulic Steel Structures].
- 4. Calculate the stresses in each gate member including the arms, bracing, horizontal girders and connections using the computer structural model. Evaluate the strength capacity of each member in accordance with Chapter H of the AISC Manual of Steel Construction, Allowable Stress Design, 14th Edition, which compares total actual stress to allowable stress for combined axial load and biaxial bending.
- 5. Evaluate gate performance for gate hinge friction coefficients of 0.15 and 0.30 to account for varying degrees of corrosion of the pins and bushings.
- 6. Determine if any of the gate members or connections fail to meet the current code requirement for the various loading conditions.
- 7. A memorandum documenting the structural analysis.

The new spillway gate construction drawings will serve as the basis for the preparation of quantity estimates, opinion of probable construction cost, technical specifications, and contract bid documents for use during construction.





Technical specifications will be prepared to describe the scope, materials, standards, and procedures to which the work is to be performed. They will include the requirements for furnishing materials and execution of the work, including removal and disposal of the existing gates and fabrication and installation of new gates.

The technical specifications along with the instructions to bidders, general conditions, special conditions, bid forms, bid schedule, design drawings, and reference drawings will form the final contract bid package. The technical specifications will be prepared as soon as the rehabilitation designs and drawings are advanced to a stage that provides an accurate description of the work involved.

The following specific tasks will be completed to develop the construction drawings for the new spillway gates:

### 60% Design:

- 1. Develop designs as necessary for such items as minor structure modifications, gate fabrication and installation, new seal details, anchorage details, coatings, and field tests and commissioning of the gates.
- 2. Develop 60% level technical specifications and coordinate with the design drawings so that all items of work and materials are covered in the specifications and compatible with notes on the drawings.
- 3. Develop 60% design submittal. The 60% submittal will include plans, technical specifications, front-end documents, and a preliminary opinion of probable construction costs (OPCC). Provide documents to the City in electronic format (PDF) for review and comment.
- 4. Participate in a review session with City staff to discuss issues and review the 60% design submittal.
- 5. Coordinate meeting with TCEQ Dam Safety to present 60% drawings.

### Pre-Final (90%) and Final Design:

- 1. Develop the pre-final design by addressing City formal review comments of 60% design submittal. The Pre-Final submittal will include plans, technical specifications, and up-to-date front-end documents. Provide documents to the City in electronic format (PDF) for review and comment.
- 2. Develop a revised OPCC for the proposed improvements based on pre-final submittal.
- 3. Participate in a review session with City staff to discuss issues and review the prefinal design.
- 4. Address any final comments from the pre-final design submittal prior to finalizing the signed/sealed (IFB) set for submittal to the City for bid.
- 5. Submit IFB construction documents to TCEQ Dam Safety for final approval.

### **Bid Phase Support Services**

Provide support to the City personnel during the bidding period to help ensure that drawings and specifications are being interpreted in accordance with the designer's intent. Under this current scope, bid support will be provided for one bid package, for the following elements:

- 1. South spillway dewatering system
- 2. North spillway dewatering system

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3. Crest gate replacement (10 gates)

Specific tasks for the bid support package will include the following:

- 1. Participate in the pre-bid conference to discuss the scope of work and to answer scope questions.
- 2. Review all questions concerning the bid documents and prepare any revisions to the plans, specifications and bid forms that may be necessary.
- 3. Attend bid opening and assist with the evaluation of bids including review of bids for responsiveness, reviewing the Contractor's Statement of Experience and confirm it meets Contract requirements.
- 4. and providing a bid award recommendation to the City.
- 5. For bids over budget, the A/E will confer with City staff and provide and, if necessary, make such revisions

to the bid documents as the City staff deems necessary to re-advertise the Project for bids.

6. Provide two (2) hard copy sets and one (1) electronic set of conformed drawings and conformed Contract

Documents (PDF and original [CAD/Word/etc.]) to the City.

### Construction Phase Services for North and South Spillway Dewatering Systems and First 10 Gates

Provide professional Construction Phase Services (CPS) to assist in obtaining a completed project in accordance with the purpose and intent of the Construction Contract Documents. The construction schedule for each new dewatering system is estimated to be approximately 15 months. The construction schedule for the first 10-gate set of new spillway gates is estimated to be approximately 12 months. Construction support under this current scope will be provided for the North and South spillway dewatering system construction and the first 10-gate set of new spillway gates. Assuming construction of the first 10-gate set can take place concurrent with the North spillway dewatering system construction, the estimated total construction time is 30 months. Design and construction support for the future gate sets is not included in this current scope, and will be negotiated in the future as an additional service after more clarity about the required scope will have been developed. Any effort directly or indirectly related to a time extension to the contractor and project duration will be an additional service for FNI.

Upon completion of the bid and negotiation phases, FNI shall proceed with the performance of construction phase services as described below. FNI shall endeavor to protect the City in providing these services, however, it is understood that FNI does not guarantee the contractor's performance, nor is FNI responsible for supervision of the contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the contractor or any subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the project site or otherwise performing any of the work of the project.

### **Project Management**

- 1. Provide regular Project Management services, including coordination and communication regarding work progress, deliverables, and monthly status reporting (to City and TCEQ).
- 2. Attend and participate in a pre-construction conference with the City and contractor, review construction schedules prepared for the Owner by the contractor pursuant to the

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requirements of the Construction Contract Documents and review proposed estimate of monthly cash requirements of the project from information provided through the City by the contractor.

- 3. Establish communication procedures between the City and contractor. Establish FNI Construction Management software, as the electronic web-based project documentation management system for distributing submittals, submittal responses, and construction related documents.
- 4. Coordinate and/or cause the timely coordination (distribution, receipt and tracking) of project documents between all parties including City, the contractor, FNI, and FNI's subcontractors/subconsultants as appropriate.
- 5. Review and make recommendations to the City regarding contractor's progress payment requests.

### **Contractor Submittal Reviews**

Review contractor's submittals throughout construction for consistency with plans, specifications, and project requirements, including the following:

- 1. Review contractor's submittals, including requests for information, modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the Construction Contract Documents for the project. Recommend action to the City for all submittals. It is anticipated that submittal reviews will consist of the following:
  - a. Record Data/Certified Test Reports/Lab Test Reports
  - b. Requests for information
  - c. Schedule of Progress
  - d. Submittals and Shop Drawings
- 2. Provide technical information for inclusion in change orders or requests for quotes. Engineering analyses, plans, and specifications required to implement a change to the project design is considered an additional service and will be as agreed to by the City in writing prior to work being performed.
- 3. Review all contract modifications and field orders for conformance with the contract documents. Assist in negotiating contractor costs for design change orders. Prepare approvals of significant design modifications and substitutions of materials and provide written reports to the City.
- 4. Recommend to the City that the contractor's work be rejected while it is in progress if, on the basis of the Engineer's observations, the engineer believes that such work will be produce a completed project that conforms generally to the Contract Documents or that it will threaten the integrity of the design concept of the completed project.
- 5. Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by the contractor.

### **Site Visits**

Make visits appropriate to the stage of construction to the site to observe the progress and the quality of work and attempt to determine in general if the work is proceeding in accordance with the Construction Contract Documents. In this effort, FNI shall endeavor to protect the City against defects and deficiencies in the work of the contractor and shall report any observed deficiencies or non-conforming work to the City.

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- 1. Monthly Meeting Visits. Attend monthly Construction Progress meetings and participate in construction site visits by the Engineer or Record, or his designee, immediately prior to, or subsequent of, progress meetings.
- 2. Site Visits. Make visits to the site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress and quality of the contractor's executed work. For the South and North dewatering system construction, seven site visits at each spillway are anticipated. For each of the first 10 new spillway gates, three site visits per gate are anticipated; one just prior to installation, one during installation, and a final one during the dry and wet tests.
- 3. Fabrication Shop Visits. Make shop visits to witness fabrication of the dewatering system and spillway gate components. It is anticipated that two (2) visits will be made for both the South and North dewatering systems and one visit will be made for the spillway gates.

Visits in excess of the specified numbers above are considered an additional service.

### **Completion Activities**

- 1. Substantial Completion. Promptly after notice from the contractor that the contractor considers the entire Work ready for its intended use, in company with the City and the contractor, conduct an inspection to determine if the Work is substantially complete. If after considering any objections of the City, the Engineer considers the Work substantially complete, Engineer shall deliver a certificate of Substantial Completion to the City and contractor.
- 2. Final Notice of Acceptability of the Work. Conduct a final inspection to determine if the completed Work of the contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor.
- 3. Prepare Record Drawings and a project completion report as follows:
  - Revise the construction drawings in accordance with the information furnished by the contractor reflecting changes in the project made during construction. "Red Lines" will be developed and maintained by the contractor and approved by the City's inspector. Two (2) sets of prints of Record Drawings shall be provided by FNI to the City.
  - Prepare and submit a project completion report summarizing the construction phase observations by FNI.
- 4. Conduct, in company with the City, a one-year inspection (one day visit) of the project to evaluate the condition and performance of the spillway gates and stoplog deployment system. Provide a technical memorandum summarizing findings from the site observations.

### **CITY REQUIREMENTS:**

The City will provide the following to FNI:

- Schedule meetings and site visits by notifying or coordinating all parties of the time and place.
- Schedule conference calls and provide for notice of the time and method of connection to all parties.
- Provide copies of all available historic documents and drawings as requested for examination by FNI.
- Attend scheduled meetings.

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- Provide field measurements and survey data of the existing spillway structure.
- Receive and review all memorandums and reports submitted by FNI.
- Coordinate and pay for advertising and distribution of Issued for Bid documents distributed during the bid phase.
- Perform quality assurance testing of materials and coatings.
- Provide front end documents and bid proposals to complete bid packages to be distributed to qualified bidders.
- Provide monthly construction reports for FNI's use in preparing monthly reports to TCEQ Dam Safety.

### **ADDITIONAL SERVICES:**

The following tasks are not included in this work authorization and would require a new work authorization or an amendment to this work authorization agreed to in writing by the City and FNI:

- Non-destructive testing of existing gate materials.
- Permitting efforts beyond what is included in Basic Services.
- Gate rehabilitation design and associated construction phase services, as an alternative to full gate replacement.
- Rehabilitation design of existing stem blocks, and stems, and associated construction phase services.
- Gate control modifications; specifically, automation of North spillway gates and evaluation of existing South automated gate controls, and associated construction phase services.
- Design, Bid, and Construction Phase support for future spillway gate sets.
- Preparation of front-end specification documents and bid proposal package.
- Operation and Maintenance (O&M) manual preparation or operator training other than for the monitoring instrumentation system.
- Third party coating and weld inspections.
- Site visits in excess of those previously listed.
- Gate Anchorage Testing of existing gate anchors during construction of any of the anticipated six (6) phases of crest gate construction.
- Design, change order coordination, and construction representation for any new anchorages required after gate anchorage testing.
- Full-time onsite representation (Resident Representative) during the construction phase.
- Assisting the City in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claim disputes with the contractor.
- Providing services made necessary because of unforeseen, concealed, or differing site conditions.

### **SERVICES PROVIDED BY THE CITY**

- 1. Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports, operation and maintenance guides, development plans, as-builts and any other data relative to the Project.
- 2. Coordinate and arrange for FNI to access the dam site as required for FNI to perform services.
- 3. Provide input and comments on deliverables, as appropriate.



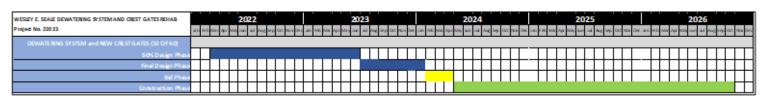
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### Schedule:

See summary tables. Notice to proceed is estimated to occur on March 25, 2022, with a kickoff meeting tentatively scheduled for April 5, 2022. Full detailed schedules have been prepared to support the information in these summary tables.

Activity	Date/Duration
Design Start Date	March 25, 2022
60% Design Phase	16 months
City Review	2 weeks
90% (Pre-Final) Design Phase	7 months
City Review	2 weeks
IFB Design Package Preparation	1 month
Bid and Award Phase Support	3 months

A graphical summary schedule is below:



If FNI's services are delayed through no fault of FNI, FNI shall be entitled to equitable adjustment of compensation and FNI shall be entitled to adjust contract schedule consistent with the number of days of delay.

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### **Engineering Fee Summary:**

WESLEY SEALE DEWATERING SYSTEM AND CREST GATES REHAB, PROJECT NO. 22023

Basic Services:	Proposed Contract
1 Preliminary Phase	\$425,789.00
2 Design Phase	\$757,538.00
3 Bid Phase	\$23,775.00
4 Construction Admin Phase Subtotal Basic	\$731,996.00
Services	\$1,939,098.00
<b>Additional Services:</b>	
1 Permitting	
Preparation	\$12,226.00
2 Topo Survey	\$62,344.00
3 Warranty Phase 4 Construction Res.	\$30,274.00
Rep.	\$0.00
5 O & M Man. & Training	\$9,152.00
Subtotal Additional Services	\$113,996.00
Summary of Fees:	
Basic Services	Ф4 000 000 00
Fees	\$1,939,098.00
Add. Services	\$113,996.00
Total Authorized Fees	\$2,053,094.00

FNI proposes to provide the services described herein. The total lump sum fee for the services shall be \$2,053,094.00. If FNI sees the Scope of Services changing such that additional services will be needed, FNI will notify the City for approval prior to proceeding with the additional scope.

Payment of services shall be due and payable upon submission of a statement for services rendered. Statements for services shall not be submitted more frequently than monthly.



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We appreciate the opportunity to submit this proposal at your request and upon your selection of FNI as your engineer of record and service provider for this project. If additional clarification is desired, please do not hesitate to contact us.

Sincerely,

FREESE AND NICHOLS, INC.

Ron Guzman, P.E.

Principal

AE Contract Revised 02/01/17 Payment Request Sample form for:

# **COMPLETE PROJECT NAME** Invoice Date 01/01/2017 Invoice No. 12345 **Project No. XXXX**

				Total	Current	Previous	Total	Remaining	Percent
Basic Services:	Contract	Amd No. 1	Amd No. 2	Contract	Invoice	Invoice	Invoice	Balance	Complete
Preliminary Phase	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$1,000.00	\$1,000.00	\$0.00	100.0%
Design Phase	\$2,000.00	\$1,000.00	\$0.00	\$3,000.00	\$1,000.00	\$500.00	\$1,500.00	\$1,500.00	20.0%
Bid Phase	\$500.00	\$0.00	\$250.00	\$750.00	\$0.00	\$0.00	\$0.00	\$750.00	0.0%
Construction Phase	\$2,500.00	\$0.00	\$1,000.00	\$3,500.00	\$0.00	\$0.00	\$0.00	\$3,500.00	%0.0
Subtotal Basic Services	\$6,000.00	\$1,000.00	\$1,250.00	\$8,250.00	\$1,000.00	\$1,500.00	\$2,500.00	\$5,750.00	30.3%
Additional Services:									
Permitting	\$2,000.00	\$0.00	\$0.00	\$2,000.00	\$500.00	\$0.00	\$500.00	\$1,500.00	25.0%
Warranty Phase	00.0\$	\$1,120.00	\$0.00	\$1,120.00	\$0.00	\$0.00	\$0.00	\$1,120.00	%0.0
Inspection	\$0.00	\$0.00	\$1,627.00	\$1,627.00	\$0.00	\$0.00	\$0.00	\$1,627.00	0.0%
Platting Survey	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Subtotal Additional Services	\$2,000.00	\$1,120.00	\$1,627.00	\$4,747.00	\$500.00	\$0.00	\$500.00	\$4,247.00	10.5%
, occursion 2000									
Summary or rees.									
Basic Services Fees	\$6,000.00	\$1,000.00	\$1,250.00	\$8,250.00	\$1,000.00	\$1,500.00	\$2,500.00	\$5,750.00	30.3%
Additional Services Fees	\$2,000.00	\$1,120.00	\$1,627.00	\$4,747.00	\$500.00	\$0.00	\$500.00	\$4,247.00	10.5%
Total of Fees	\$8,000.00	\$2,120.00	\$2,877.00	\$12,997.00	\$1,500.00	\$1,500.00	\$3,000.00	\$9,997.00	23.1%

# Notes: A PURCHASE ORDER NUMBER MUST BE INCLUDED ON ALL INVOICES AND INVOICE CORRESPONDENCE. FAILURE TO COMPLY WILL RESULT IN DELAYED PAYMENT OF INVOICES.

If needed, update this sample form based on the contract requirements.

If applicable, refer to the contract for information on what to include with time and materials (T&M).

### **EXHIBIT C**

### **Insurance Requirements**

### **Pre-Design, Design and General Consulting Contracts**

- 1.1 Consultant must not commence work under this agreement until all required insurance has been obtained and such insurance has been approved by the City. Consultant must not allow any subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.
- 1.2 Consultant must furnish to the Director of Engineering Services with the signed agreement a copy of Certificates of Insurance (COI) with applicable policy endorsements showing the following minimum coverage by an insurance company(s) acceptable to the City's Risk Manager. A waiver of subrogation is required on all applicable policies. Endorsements must be provided with COI. Project name and or number must be listed in Description Box of COI.

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE
30-written day notice of cancellation,	Bodily Injury and Property Damage
required on all certificates or by	Per occurrence - aggregate
applicable policy endorsements	
PROFESSIONAL LIABILITY	\$1,000,000 Per Claim
(Errors and Omissions)	
	If claims made policy, retro date must
	be prior to inception of agreement,
	have 3-year reporting period provisions
	or be maintained for 3 years after
	project completion.

- 1.3 In the event of accidents of any kind related to this agreement, Consultant must furnish the City with copies of all reports of any accidents within 10 days of the accident.
- 1.4 Consultant shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis, with the exception of professional liability, which may be on a per claims made basis, by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A- VII. **Consultant is required to provide City with renewal Certificates.**

1

Rev 12/20

1.5 Consultant is required to submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Consultant shall pay any costs incurred resulting from said changes. All notices under this Article shall be given to City at the following address:

City of Corpus Christi Attn: Engineering Services P.O. Box 9277 Corpus Christi, TX 78469-9277

- 1.6 Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:
  - 1.6.1 Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation or non-renewal of coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium.
- 1.7 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Consultant shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this contract.
- 1.8 In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to remove the exhibit hereunder, and/or withhold any payment(s) if any, which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.
- 1.9 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractor's performance of the work covered under this agreement.
- 1.10 It is agreed that Consultant's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Corpus Christi for liability arising out of operations under this agreement.
- 1.11 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this agreement.

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## **Excerpt from FORM 00 72 00 GENERAL CONDITIONS for Construction Projects related to design services**

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### ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 Defined Terms

- A. Terms with initial capital letters, including the term's singular and plural forms, have the meanings indicated in this paragraph wherever used in the Bidding Requirements or Contract Documents. In addition to the terms specifically defined, terms with initial capital letters in the Contract Documents may include references to identified articles and paragraphs, and the titles of other documents or forms.
  - 1. Addenda Documents issued prior to the receipt of Bids which clarify or modify the Bidding Requirements or the proposed Contract Documents.
  - Agreement The document executed between Owner and Contractor covering the Work.
  - 3. Alternative Dispute Resolution The process by which a disputed Claim may be settled as an alternative to litigation, if Owner and Contractor cannot reach an agreement between themselves.
  - 4. Application for Payment The forms used by Contractor to request payments from Owner and the supporting documentation required by the Contract Documents.
  - 5. Award Date The date the City Council of the City of Corpus Christi (City) authorizes the City Manager or designee to execute the Contract on behalf of the City.
  - 6. Bid The documents submitted by a Bidder to establish the proposed Contract Price and Contract Times and provide other information and certifications as required by the Bidding Requirements.
  - 7. Bidding Documents The Bidding Requirements, the proposed Contract Documents, and Addenda.
  - 8. Bidder An individual or entity that submits a Bid to Owner.
  - 9. Bidding Requirements The Invitation for Bids, Instructions to Bidders, Bid Security, Bid Form and attachments, and required certifications.
  - 10. Bid Security The financial security in the form of a bid bond provided by Bidder at the time the Bid is submitted and held by Owner until the Agreement is executed and the evidence of insurance and Bonds required by the Contract Documents are provided. A cashier's check, certified check, money order or bank draft from any State or National Bank will also be acceptable.
  - 11. Bonds Performance Bond, Payment Bond, Maintenance Bond, and other Surety instruments executed by Surety. When in singular form, refers to individual instrument.
  - 12. Change Order A document issued on or after the Effective Date of the Contract and signed by Owner and Contractor which modifies the Work, Contract Price, Contract Times, or terms and conditions of the Contract.
  - 13. Change Proposal A document submitted by Contractor in accordance with the requirements of the Contract Documents:
    - a. Requesting an adjustment in Contract Price or Contract Times;

- b. Contesting an initial decision concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents;
- c. Challenging a set-off against payment due; or
- d. Seeking a Modification with respect to the terms of the Contract.
- 14. City Engineer The Corpus Christi City Engineer and/or his designated representative as identified at the preconstruction conference or in the Notice to Proceed.
- 15. Claim A demand or assertion by Owner or Contractor submitted in accordance with the requirements of the Contract Documents. A demand for money or services by an entity other than the Owner or Contractor is not a Claim.
- 16. Constituent of Concern Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous wastes, and substances, products, wastes, or other materials that are or become listed, regulated, or addressed pursuant to:
  - a. The Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA");
  - b. The Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.;
  - c. The Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA");
  - d. The Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.;
  - e. The Clean Water Act, 33 U.S.C. §§1251 et seq.;
  - f. The Clean Air Act, 42 U.S.C. §§7401 et seq.; or
  - g. Any other Laws or Regulations regulating, relating to, or imposing liability or standards of conduct concerning hazardous, toxic, or dangerous waste, substance, or material.
- 17. Contract The entire integrated set of documents concerning the Work and describing the relationship between the Owner and Contractor.
- 18. Contract Amendment A document issued on or after the Effective Date of the Contract and signed by Owner and Contractor which:
  - a. Authorizes new phases of the Work and establishes the Contract Price, Contract Times, or terms and conditions of the Contract for the new phase of Work; or
  - b. Modifies the terms and conditions of the Contract, but does not make changes in the Work.
- 19. Contract Documents Those items designated as Contract Documents in the Agreement.
- 20. Contract Price The monetary amount stated in the Agreement and as adjusted by Modifications, and increases or decreases in unit price quantities, if any, that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
- 21. Contract Times The number of days or the dates by which Contractor must:
  - a. Achieve specified Milestones;

- b. Achieve Substantial Completion; and
- c. Complete the Work.
- 22. Contractor The individual or entity with which Owner has contracted for performance of the Work.
- 23. Contractor's Team Contractor and Subcontractors, Suppliers, individuals, or entities directly or indirectly employed or retained by them to perform part of the Work or anyone for whose acts they may be liable.
- 24. Cost of the Work The sum of costs incurred for the proper performance of the Work as allowed by Article 15.
- 25. Defective When applied to Work, refers to Work that is unsatisfactory, faulty, or deficient in that it:
  - a. Does not conform to the Contract Documents;
  - b. Does not meet the requirements of applicable inspections, reference standards, tests, or approvals referred to in the Contract Documents; or
  - c. Has been damaged or stolen prior to OAR's recommendation of final payment unless responsibility for the protection of the Work has been assumed by Owner at Substantial Completion in accordance with Paragraphs 17.12 or 17.13.
- 26. <u>Designer</u> The individuals or entity named as <u>Designer</u> in the Agreement and the subconsultants, individuals, or entities directly or indirectly employed or retained by <u>Designer</u> to provide design or other technical services to the Owner. <u>Designer</u> has responsibility for engineering or architectural design and technical issues related to the Contract Documents. <u>Designers</u> are Licensed Professional Engineers, Registered Architects or Registered Landscape Architects qualified to practice their profession in the State of Texas.
- 27. Drawings The part of the Contract that graphically shows the scope, extent, and character of the Work. Shop Drawings and other Contractor documents are not Drawings.
- 28. Effective Date of the Contract The date indicated in the Agreement on which the City Manager or designee has signed the Contract.
- 29. Field Order A document issued by OAR or <u>Designer</u> requiring changes in the Work that do not change the Contract Price or the Contract Times.
- 30. Hazardous Environmental Condition The presence of Constituents of Concern at the Site in quantities or circumstances that may present a danger to persons or property exposed to Constituents of Concern. The presence of Constituents of Concern at the Site necessary for the execution of the Work or to be incorporated in the Work is not a Hazardous Environmental Condition provided these Constituents of Concern are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract.
- 31. Indemnified Costs All costs, losses, damages, and legal or other dispute resolution costs resulting from claims or demands against Owner's Indemnitees. These costs include fees for engineers, architects, attorneys, and other professionals.

- 32. Laws and Regulations; Laws or Regulations Applicable laws, statutes, rules, regulations, ordinances, codes, and orders of governmental bodies, agencies, authorities, and courts having jurisdiction over the Project.
- 33. Liens Charges, security interests, or encumbrances upon Contract related funds, real property, or personal property.
- 34. Milestone A principal event in the performance of the Work that Contractor is required by Contract to complete by a specified date or within a specified period of time.
- 35. Modification Change made to the Contract Documents by one of the following methods:
  - a. Contract Amendment;
  - b. Change Order;
  - c. Field Order; or
  - d. Work Change Directive.
- 36. Notice of Award The notice of Owner's intent to enter into a contract with the Selected Bidder.
- 37. Notice to Proceed A notice to Contractor of the Contract Times and the date Work is to begin.
- 38. Owner The City of Corpus Christi (City), a Texas home-rule municipal corporation and political subdivision organized under the laws of the State of Texas, acting by and through its duly authorized City Manager and his designee, the City Engineer (the Director of Engineering Services), and the City's officers, employees, agents, or representatives, authorized to administer design and construction of the Project.
- 39. Owner's Authorized Representative or OAR The individual or entity named as OAR in the Agreement and the consultants, subconsultants, individuals, or entities directly or indirectly employed or retained by them to provide construction management services to the Owner. The OAR may be an employee of the Owner.
- 40. Owner's Indemnitees Each member of the OPT and their officers, directors, members, partners, employees, agents, consultants, and subcontractors.
- 41. Owner's Project Team or OPT The Owner, Owner's Authorized Representative, Resident Project Representative, <u>Designer</u>, and the consultants, subconsultants, individuals, or entities directly or indirectly employed or retained by them to provide services to the Owner.
- 42. Partial Occupancy or Use Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
- 43. Progress Schedule A schedule prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times. The Progress Schedule must be a Critical Path Method (CPM) Schedule.
- 44. Project The total undertaking to be accomplished for Owner under the Contract Documents.

- 45. Resident Project Representative or RPR The authorized representative of OPT assigned to assist OAR at the Site. As used herein, the term Resident Project Representative includes assistants and field staff of the OAR.
- 46. Samples Physical examples of materials, equipment, or workmanship representing some portion of the Work that are used to establish the standards for that portion of the Work.
- 47. Schedule of Documents A schedule of required documents, prepared, and maintained by Contractor.
- 48. Schedule of Values A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for Contractor's Applications for Payment.
- 49. Selected Bidder The Bidder to which Owner intends to award the Contract.
- 50. Shop Drawings All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
- 51. Site Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed. The Site includes rights-of-way, easements, and other lands furnished by Owner which are designated for use by the Contractor.
- 52. Specifications The part of the Contract that describes the requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 53. Subcontractor An individual or entity having a direct contract with Contractor or with other Subcontractors or Suppliers for the performance of a part of the Work.
- 54. Substantial Completion The point where the Work or a specified part of the Work is sufficiently complete to be used for its intended purpose in accordance with the Contract Documents.
- 55. Supplementary Conditions The part of the Contract that amends or supplements the General Conditions.
- 56. Supplier A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with Subcontractors or other Suppliers to furnish materials or equipment to be incorporated in the Work.
- 57. Technical Data Those items expressly identified as Technical Data in the Supplementary Conditions with respect to either:
  - a. Subsurface conditions at the Site;
  - b. Physical conditions relating to existing surface or subsurface structures at the Site, except Underground Facilities; or
  - c. Hazardous Environmental Conditions at the Site.
- 58. Underground Facilities All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, other similar facilities or appurtenances, and encasements containing these facilities which are used to convey electricity, gases,

- steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 59. Unit Price Work Work to be paid for on the basis of unit prices.
- 60. Work The construction of the Project or its component parts as required by the Contract Documents.
- 61. Work Change Directive A directive issued to Contractor on or after the Effective Date of the Contract ordering an addition, deletion, or revision in the Work. The Work Change Directive serves as a memorandum of understanding regarding the directive until a Change Order can be issued.

# 1.02 Terminology

- A. The words and terms discussed in this Paragraph 1.02 are not defined, but when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. It is understood that the cost for performing Work is included in the Contract Price and no additional compensation is to be paid by Owner unless specifically stated otherwise in the Contract Documents. Expressions including or similar to "at no additional cost to Owner," "at Contractor's expense," or similar words mean that the Contractor is to perform or provide specified operation of Work without an increase in the Contract Price.
- C. The terms "day" or "calendar day" mean a calendar day of 24 hours measured from midnight to the next midnight.
- D. The meaning and intent of certain terms or adjectives are described as follows:
  - 1. The terms "as allowed," "as approved," "as ordered," "as directed," or similar terms in the Contract Documents indicate an exercise of professional judgment by the OPT.
  - Adjectives including or similar to "reasonable," "suitable," "acceptable," "proper,"
     "satisfactory," or similar adjectives are used to describe a determination of OPT
     regarding the Work.
  - 3. Any exercise of professional judgment by the OPT will be made solely to evaluate the Work for general compliance with the Contract Documents unless there is a specific statement in the Contract Documents indicating otherwise.
  - 4. The use of these or similar terms or adjectives does not assign a duty or give OPT authority to supervise or direct the performance of the Work, or assign a duty or give authority to the OPT to undertake responsibilities contrary to the provisions of Articles 9 or 10 or other provisions of the Contract Documents.
- E. The use of the words "furnish," "install," "perform," and "provide" have the following meanings when used in connection with services, materials, or equipment:
  - 1. Furnish means to supply and deliver the specified services, materials, or equipment to the Site or other specified location ready for use or installation.
  - 2. Install means to complete construction or assembly of the specified services, materials, or equipment so they are ready for their intended use.

- 3. Perform or provide means to furnish and install specified services, materials, or equipment, complete and ready for their intended use.
- 4. Perform or provide the specified services, materials, or equipment complete and ready for intended use if the Contract Documents require specific services, materials, or equipment, but do not expressly use the words "furnish," "install," "perform," or "provide."
- F. Contract Documents are written in modified brief style:
  - 1. Requirements apply to all Work of the same kind, class, and type even though the word "all" is not stated.
  - Simple imperative sentence structure is used which places a verb as the first word in the sentence. It is understood that the words "furnish," "install," "perform," "provide," or similar words include the meaning of the phrase "The Contractor shall..." before these words.
  - 3. Unless specifically stated that action is to be taken by the OPT or others, it is understood that the action described is a requirement of the Contractor.
- G. Words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with this recognized meaning unless stated otherwise in the Contract Documents.
- H. Written documents are required where reference is made to notices, reports, approvals, consents, documents, statements, instructions, opinions or other types of communications required by the Contract Documents. Approval and consent documents must be received by Contractor prior to the action or decision for which approval or consent is given. These may be made in printed or electronic format through the OPT's project management information system or other electronic media as required by the Contract Documents or approved by the OAR.
- I. Giving notice as required by the Contract Documents may be by printed or electronic media using a method that requires acknowledgment of the receipt of that notice.

## **ARTICLE 2 – PRELIMINARY MATTERS**

## ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

#### 3.01 Intent

B. Provide equipment that is functionally complete as described in the Contract Documents. The Drawings and Specifications do not indicate or describe all of the Work required to complete the installation of products purchased by the Owner or Contractor. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the **Designer** through the OAR.

#### 3.02 Reference Standards

Comply with applicable construction industry standards, whether referenced or not.

1. Standards referenced in the Contract Documents govern over standards not referenced but recognized as applicable in the construction industry.

- 2. Comply with the requirements of the Contract Documents if they produce a higher quality of Work than the applicable construction industry standards.
- 3. <u>Designer</u> determines whether a code or standard is applicable, which of several are applicable, or if the Contract Documents produce a higher quality of Work.
- 3.03 Reporting and Resolving Discrepancies
- 3.04 Interpretation of the Contract Documents

Submit questions regarding the design of the Project described in the Contract Documents to the OAR immediately after those questions arise. OAR is to request an interpretation of the Contract Documents from the **Designer**. **Designer** is to respond to these questions by providing an interpretation of the Contract Documents. OAR will coordinate the response of the OPT to Contractor.

C. OPT may initiate a Modification to the Contract Documents through the OAR if a response to the question indicates that a change in the Contract Documents is required. Contractor may appeal **Designer**'s or OAR's interpretation by submitting a Change Proposal.

#### ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

# ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

- 5.01 Availability of Lands
- 5.02 Use of Site and Other Areas
- 5.03 Subsurface and Physical Conditions
- 5.04 Differing Subsurface or Physical Conditions

OAR is to notify the OPT after receiving notice of a differing subsurface or physical condition from the Contractor. **Designer** is to:

- 1. Promptly review the subsurface or physical condition;
- 2. Determine the necessity of OPT's obtaining additional exploration or tests with respect the subsurface or physical condition;
- 3. Determine if the subsurface or physical condition falls within one or more of the differing Site condition categories in Paragraph 5.04.A;
- 4. Prepare recommendations to OPT regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question;
- 5. Determine the need for changes in the Drawings or Specifications; and
- 6. Advise OPT of **Designer**'s findings, conclusions, and recommendations.
- C. OAR is to issue a statement to Contractor regarding the subsurface or physical condition in question and recommend action as appropriate after review of <u>Designer</u>'s findings, conclusions, and recommendations.

## 5.05 Underground Facilities

The **Designer** is to take the following action after receiving notice from the OAR:

- Promptly review the Underground Facility and conclude whether the Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy;
- 2. Prepare recommendations to OPT regarding the Contractor's resumption of Work in connection with this Underground Facility;
- Determine the extent to which a change is required in the Drawings or Specifications to document the consequences of the existence or location of the Underground Facility; and
- 4. Advise OAR of <u>Designer</u>'s findings, conclusions, and recommendations and provide revised Drawings and Specifications if required.
- D. OAR is to issue a statement to Contractor regarding the Underground Facility in question and recommend action as appropriate after review of <u>Designer</u>'s findings, conclusions, and recommendations.

#### **ARTICLE 6 – BONDS AND INSURANCE**

## **ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES**

#### ARTICLE 8 – OTHER WORK AT THE SITE

#### ARTICLE 9 – OWNER'S AND OPT'S RESPONSIBILITIES

- 9.01 Communications to Contractor
  - A. OPT issues communications to Contractor through OAR except as otherwise provided in the Contract Documents.
- 9.02 Replacement of Owner's Project Team Members
  - A. Owner may replace members of the OPT at its discretion.
- 9.03 Furnish Data
  - A. OPT is to furnish the data required of OPT under the Contract Documents.
- 9.04 Pay When Due
- 9.05 Lands and Easements; Reports and Tests
  - A. Owner's duties with respect to providing lands and easements are described in Paragraph 5.01. OPT will make copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site available to Contractor in accordance with Paragraph 5.03.

- 9.06 Insurance
- 9.07 Modifications
- 9.08 Inspections, Tests, and Approvals
  - A. OPT's responsibility with respect to certain inspections, tests, and approvals are described in Paragraph 16.02.
- 9.09 Limitations on OPT's Responsibilities
  - A. The OPT does not supervise, direct, or have control or authority over, and is not responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or related safety precautions and programs, or for failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. OPT is not responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 Undisclosed Hazardous Environmental Condition
  - A. OPT's responsibility for undisclosed Hazardous Environmental Conditions is described in Paragraph 5.06.
- 9.11 Compliance with Safety Program
  - A. Contractor is to inform the OPT of its safety programs and OPT is to comply with the specific applicable requirements of this program.

## ARTICLE 10 – OAR'S AND DESIGNER'S STATUS DURING CONSTRUCTION

- 10.01 Owner's Representative
  - A. OAR is Owner's representative. The duties and responsibilities and the limitations of authority of OAR as Owner's representative are described in the Contract Documents.
- 10.02 Visits to Site
  - A. <u>Designer</u> is to make periodic visits to the Site to observe the progress and quality of the Work. <u>Designer</u> is to determine, in general, if the Work is proceeding in accordance with the Contract Documents based on observations made during these visits. <u>Designer</u> is not required to make exhaustive or continuous inspections to check the quality or quantity of the Work. <u>Designer</u> is to inform the OPT of issues or concerns and OAR is to work with Contractor to address these issues or concerns. <u>Designer</u>'s visits and observations are subject to the limitations on <u>Designer</u>'s authority and responsibility described in Paragraphs 9.09 and 10.07.
  - B. OAR is to observe the Work to check the quality and quantity of Work, implement Owner's quality assurance program, and administer the Contract as Owner's representative as described in the Contract Documents. OAR's visits and observations are subject to the limitations on OAR's authority and responsibility described in Paragraphs 9.09 and 10.07.

#### 10.03 Resident Project Representatives

A. Resident Project Representatives assist OAR in observing the progress and quality of the Work at the Site. The limitations on Resident Project Representatives' authority and responsibility are described in Paragraphs 9.09 and 10.07.

## 10.04 Rejecting Defective Work

A. OPT has the authority to reject Work in accordance with Article 16. OAR is to issue a Defective Work Notice to Contractor and document when Defective Work has been corrected or accepted in accordance with Article 16.

## 10.05 Shop Drawings, Modifications and Payments

- A. <u>Designer</u>'s authority related to Shop Drawings and Samples are described in the Contract Documents.
- B. <u>Designer</u>'s authority related to design calculations and design drawings submitted in response to a delegation of professional design services are described in Paragraph 7.15.
- C. OAR and **Designer**'s authority related to Modifications is described in Article 11.
- D. OAR's authority related to Applications for Payment is described in Articles 15 and 17.

## 10.06 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. OAR is to render decisions regarding non-technical or contractual / administrative requirements of the Contract Documents and will coordinate the response of the OPT to Contractor.
- B. <u>Designer</u> is to render decisions regarding the conformance of the Work to the requirements of the Contract Documents. <u>Designer</u> will render a decision to either correct the Defective Work, or accept the Work under the provisions of Paragraph 16.04, if Work does not conform to the Contract Documents. OAR will coordinate the response of the OPT to Contractor.
- C. OAR will issue a Request for a Change Proposal if a Modification is required. OAR will provide documentation for changes related to the non-technical or contractual / administrative requirements of the Contract Documents. **Designer** will provide documentation if design related changes are required.
- D. Contractor may appeal <u>Designer</u>'s decision by submitting a Change Proposal if Contractor does not agree with the <u>Designer</u>'s decision.

## 10.07 Limitations on OAR's and **Designer**'s Authority and Responsibilities

A. OPT is not responsible for the acts or omissions of Contractor's Team. No actions or failure to act, or decisions made in good faith to exercise or not exercise the authority or responsibility available under the Contract Documents creates a duty in contract, tort, or otherwise of the OPT to the Contractor or members of the Contractor's Team.

#### ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

#### **ARTICLE 12 – CHANGE MANAGEMENT**

## 12.01 Requests for Change Proposal

- A. <u>Designer</u> will initiate Modifications by issuing a Request for a Change Proposal (RCP).
  - 1. <u>Designer</u> will prepare a description of proposed Modifications.
  - 2. <u>Designer</u> will issue the Request for a Change Proposal form to Contractor. A number will be assigned to the Request for a Change Proposal when issued.
  - 3. Return a Change Proposal in accordance with Paragraph 12.02 to the <u>Designer</u> for evaluation by the OPT.

## 12.02 Change Proposals

- A. Submit a Change Proposal (CP) to the <u>Designer</u> for Contractor initiated changes in the Contract Documents or in response to a Request for Change Proposal.
  - 1. Use the Change Proposal form provided.
  - 2. Assign a number to the Change Proposal when issued.
  - 3. Include with the Change Proposal:
    - a. A complete description of the proposed Modification if Contractor initiated or proposed changes to the OPT's description of the proposed Modification.
    - b. The reason the Modification is requested, if not in response to a Request for a Change Proposal.
    - c. A detailed breakdown of the cost of the change if the Modification requires a change in Contract Price. The itemized breakdown is to include:
      - 1) List of materials and equipment to be installed;
      - 2) Man hours for labor by classification;
      - 3) Equipment used in construction;
      - 4) Consumable supplies, fuels, and materials;
      - 5) Royalties and patent fees;
      - 6) Bonds and insurance;
      - 7) Overhead and profit;
      - 8) Field office costs;
      - 9) Home office cost; and
      - 10) Other items of cost.
    - d. Provide the level of detail outlined in the paragraph above for each Subcontractor or Supplier actually performing the Work if Work is to be provided by a Subcontractor or Supplier. Indicate appropriate Contractor mark-ups for Work

- provided through Subcontractors and Suppliers. Provide the level of detail outline in the paragraph above for self-performed Work.
- e. Submit Change Proposals that comply with Article 15 for Cost of Work.
- f. Provide a revised schedule. Show the effect of the change on the Project Schedule and the Contract Times.
- B. Submit a Change Proposal to the **<u>Designer</u>** to request a Field Order.
- C. A Change Proposal is required for all substitutions or deviations from the Contract Documents.
- D. Request changes to products in accordance with Article 25.

## 12.03 **Designer** Will Evaluate Request for Modification

- A. <u>Designer</u> will issue a Modification per Article 11 if the Change Proposal is acceptable to the Owner. <u>Designer</u> will issue a Change Order or Contract Amendment for any changes in Contract Price or Contract Times.
  - Change Orders and Contract Amendments will be sent to the Contractor for execution
    with a copy to the Owner recommending approval. A Work Change Directive may be
    issued if Work needs to progress before the Change Order or Contract Amendment can
    be authorized by the Owner.
  - 2. Work Change Directives, Change Orders, and Contract Amendments can only be approved by the Owner.
    - a. Work performed on the Change Proposal prior to receiving a Work Change Directive or approval of the Change Order or Contract Amendment is performed at the Contractor's risk.
    - b. No payment will be made for Work on Change Orders or Contract Amendments until approved by the Owner.
- B. The Contractor may be informed that the Request for a Change Proposal is not approved and construction is to proceed in accordance with the Contract Documents.

#### **ARTICLE 13 – CLAIMS**

#### 13.01 Claims

## 13.02 Claims Process

- A. Claims must be initiated by written notice. Notice must conspicuously state that it is a notice of a Claim in the subject line or first sentence. Notice must also list the date of first occurrence of the claimed event.
- B. Claims by Contractor must be in writing and delivered to the Owner, **Designer** and the OAR within 7 days:
  - 1. After the start of the event giving rise to the Claim; or
  - 2. After a final decision on a Change Proposal has been made.

- C. Claims by Contractor that are not received within the time period provided by section 13.02(B) are waived. Owner may choose to deny such Claims without a formal review. Any Claims by Contractor that are not brought within 90 days following the termination of the Contract are waived and shall be automatically deemed denied.
- D. Claims by Owner must be submitted by written notice to Contractor.
- E. The responsibility to substantiate a Claim rests with the entity making the Claim. Claims must contain sufficient detail to allow the other party to fully review the Claim.
  - 1. Claims seeking an adjustment of Contract Price must include the Contractor's job cost report. Provide additional documentation as requested by OAR.
  - Claims seeking an adjustment of Contract Time must include native schedule files in Primavera or MS Project digital format. Provide additional documentation as requested by OAR.
- F. Contractor must certify that the Claim is made in good faith, that the supporting data is accurate and complete, and that to the best of Contractor's knowledge and belief, the relief requested accurately reflects the full compensation to which Contractor is entitled.
- G. Claims by Contractor against Owner and Claims by Owner against Contractor, including those alleging an error or omission by <u>Designer</u> but excluding those arising under Section 7.12, shall be referred initially to **Designer** for consideration and recommendation to Owner.
- H. <u>Designer</u> may review a Claim by Contractor within 30 days of receipt of the Claim and take one or more of the following actions:
  - 1. Request additional supporting data from the party who made the Claim;
  - 2. Issue a recommendation:
  - 3. Suggest a compromise; or
  - 4. Advise the parties that <u>Designer</u> is not able to make a recommendation due to insufficient information or a conflict of interest.
- I. If the **Designer** does not take any action, the claim shall be deemed denied.
- J. The Contractor and the Owner shall seek to resolve the Claim through the exchange of information and direct negotiations. If no agreement is reached within 90 days, the Claim shall be deemed denied. The Owner and Contractor may extend the time for resolving the Claim by mutual agreement. Notify OAR of any actions taken on a Claim.
- K. Owner and Contractor may mutually agree to mediate the underlying dispute at any time after a recommendation is issued by the **Designer**.

#### **ARTICLE 14 – PREVAILING WAGE RATE REQUIREMENTS**

ARTICLE 15 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

ARTICLE 16 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

ARTICLE 17 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

**ARTICLE 18 – SUSPENSION OF WORK AND TERMINATION** 

ARTICLE 19 - PROJECT MANAGEMENT

**ARTICLE 20 – PROJECT COORDINATION** 

- 20.01 Work Included
- 20.02 Document Submittal
- 20.03 Communication During Project
  - A. The OAR is to be the first point of contact for all parties on matters concerning this Project.
  - B. The **<u>Designer</u>** will coordinate correspondence concerning:
    - 1. Documents, including Applications for Payment.
    - 2. Clarification and interpretation of the Contract Documents.
    - 3. Contract Modifications.
    - 4. Observation of Work and testing.
    - 5. Claims.

## 20.04 Requests for Information

- A. Submit Request for Information (RFI) to the <u>Designer</u> to obtain additional information or clarification of the Contract Documents.
  - 1. Submit a separate RFI for each item on the form provided.
  - Attach adequate information to permit a written response without further clarification.
     <u>Designer</u> will return requests that do not have adequate information to the Contractor for additional information. Contractor is responsible for all delays resulting from multiple document submittals due to inadequate information.
  - 3. A response will be made when adequate information is provided. Response will be made on the RFI form or in attached information.
- B. Response to an RFI is given to provide additional information, interpretation, or clarification of the requirements of the Contract Documents, and does not modify the Contract Documents.
- C. <u>Designer</u> will initiate a Request for a Change Proposal (RCP) per Article 12 if the RFI indicates that a Contract Modification is required.

#### **ARTICLE 21 – QUALITY MANAGEMENT**

## **ARTICLE 22 – FINAL RESOLUTION OF DISPUTES**

#### ARTICLE 23 – MINORITY/MBE/DBE PARTICIPATION POLICY

#### **ARTICLE 24 – DOCUMENT MANAGEMENT**

## **ARTICLE 25 – SHOP DRAWINGS**

#### 25.01 Work Included

- A. Shop Drawings are required for those products that cannot adequately be described in the Contract Documents to allow fabrication, erection, or installation of the product without additional detailed information from the Supplier.
- B. Submit Shop Drawings as required by the Contract Documents and as reasonably requested by the OPT to:
  - 1. Record the products incorporated into the Project for the Owner;
  - 2. Provide detailed information for the products proposed for the Project regarding their fabrication, installation, commissioning, and testing; and
  - 3. Allow the <u>Designer</u> to advise the Owner if products proposed for the Project by the Contractor conform, in general, to the design concepts of the Contract Documents.

## 25.02 Quality Assurance

## 25.03 Contractor's Responsibilities

## 25.04 Shop Drawing Requirements

- A. Provide adequate information in Shop Drawings and Samples so **Designer** can:
  - 1. Assist the Owner in selecting colors, textures, or other aesthetic features.
  - 2. Compare the proposed features of the product with the specified features and advise Owner that the product does, in general, conform to the Contract Documents.
  - Compare the performance features of the proposed product with those specified and advise the Owner that the product does, in general, conform to the performance criteria specified in the Contract Documents.
  - 4. Review required certifications, guarantees, warranties, and service agreements for compliance with the Contract Documents.

- 25.05 Special Certifications and Reports
- 25.06 Warranties and Guarantees
- 25.07 Shop Drawing Submittal Procedures
- 25.08 Sample and Mockup Submittal Procedures
- 25.09 Requests for Deviation
- 25.10 **Designer** Responsibilities
  - A. Shop Drawings will be received by the <u>Designer</u>. <u>Designer</u> will log the documents and review per this Article for general conformance with the Contract Documents.
    - <u>Designer</u>'s review and approval will be only to determine if the products described in the Shop Drawing or Sample will, after installation or incorporation into the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
    - <u>Designer</u>'s review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
    - 3. <u>Designer</u>'s review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
  - B. Comments will be made on items called to the attention of the <u>Designer</u> for review and comment. Any marks made by the <u>Designer</u> do not constitute a blanket review of the document submittal or relieve the Contractor from responsibility for errors or deviations from the Contract requirements.
    - 1. <u>Designer</u> will respond to Contractor's markups by either making markups directly in the Shop Drawings file using the color green or by attaching a Document Review Comments form with review comments.
    - 2. Shop Drawings that are reviewed will be returned with one or more of the following status designations:
      - a. Approved: Shop Drawing is found to be acceptable as submitted.
      - b. Approved as Noted: Shop Drawing is Approved so long as corrections or notations made by **Designer** are incorporated into the Show Drawing.
      - c. Not Approved: Shop Drawing or products described are not acceptable.
    - 3. Shop Drawing will also be designated for one of the following actions:
      - a. Final distribution: Shop Drawing is acceptable without further action and has been filed as a record document.
      - b. Shop Drawing not required: A Shop Drawing was not required by the Contract Documents. Resubmit the document per Article 26.

- c. Cancelled: This action indicates that for some reason, the Shop Drawing is to be removed from consideration and all efforts regarding the processing of that document are to cease.
- d. Revise and resubmit: Shop Drawing has deviations from the Contract Documents, significant errors, or is inadequate and must be revised and resubmitted for subsequent review.
- e. Resubmit with corrections made: Shop Drawing is "Approved as Noted," but has significant markups. Make correction and notations to provide a revised document with markup incorporated into the original document so that no markups are required.
- f. Returned without review due to excessive deficiencies: Document does not meet the requirement of the Specifications for presentation or content to the point where continuing to review the document would be counterproductive to the review process or clearly does not meet the requirements of the Contract Documents. Revise the Shop Drawing to comply with the requirements of this Section and resubmit.
- g. Actions a through c will close out the Shop Drawing review process and no further action is required as a Shop Drawing. Actions d through f require follow up action to close out the review process.
- 4. Drawings with a significant or substantial number of markings by the Contractor may be marked "Approved as Noted" and "Resubmit with corrections made." These drawings are to be revised to provide a clean record of the Shop Drawing. Proceed with ordering products as the documents are revised.
- 5. Dimensions or other data that does not appear to conform to the Contract Documents will be marked as "At Variance With" (AVW) the Contract Documents or other information provided. The Contractor is to make revisions as appropriate to comply with the Contract Documents.
- C. Bring deviations to the Shop Drawings to the attention of the <u>Designer</u> for approval by using the Shop Drawing Deviation Request form. Use a single line for each requested deviation so the Status and Action for each deviation can be determined for that requested deviation. If approval or rejection of a requested deviation will impact other requested deviations, then all related deviations should be included in that requested deviation line so the status and action can be determined on the requested deviation as a whole.
- D. Requested deviations will be reviewed as possible Modification to the Contract Documents.
  - A Requested deviation will be rejected as "Not Approved" if the requested deviation is unacceptable. Contractor is to revise and resubmit the Shop Drawing with corrections for approval.
  - 2. A Field Order will be issued by the <u>Designer</u> for deviations approved by the <u>Designer</u> if the requested deviation is acceptable and if the requested deviation will not result in a change in Contract Price or Contract Times. Requested deviations from the Contract Documents may only be approved by Field Order.
  - 3. A requested deviation will be rejected if the requested deviation is acceptable but the requested deviation will or should result in a change in Contract Price or Contract Times.

- Submit any requested deviation that requires a change in Contract Price or Contract Times as a Change Proposal for approval prior to resubmitting the Shop Drawing.
- E. Contractor is to resubmit the Shop Drawing until it is acceptable and marked Approved or Approved as Noted and is assigned an action per Paragraph 25.10.B that indicates that the Shop Drawing process is closed.
- F. Information that is submitted as a Shop Drawings that should be submitted as Record Data or other type of document, or is not required may be returned without review, or may be deleted. No further action is required and the Shop Drawing process for this document will be closed.

#### **ARTICLE 26 – RECORD DATA**

- 26.01 Work Included
- 26.02 Quality Assurance
- 26.03 Contractor's Responsibilities
- 26.04 Record Data Requirements
- 26.05 Special Certifications and Reports
- 26.06 Warranties and Guarantees
- 26.07 Record Data Submittal Procedures
- 26.08 **Designer**'s Responsibilities
  - A. Record Data will be received by the **<u>Designer</u>**, logged, and provided to Owner as the Project record.
    - 1. Record Data may be reviewed to see that the information provided is adequate for the purpose intended. Record Data not meeting the requirements of Paragraph 26.02 may be rejected as unacceptable.
    - Record Data is not reviewed for compliance with the Contract Documents. Comments may be returned if deviations from the Contract Documents are noted during the cursory review performed to see that the information is adequate.
    - Contractor's responsibility for full compliance with the Contract Documents is not relieved by the review of Record Data. Contract modifications can only be approved by a Modification.
  - B. <u>Designer</u> may take the following action in processing Record Data:
    - 1. File Record Data as received if the cursory review indicates that the document meets the requirements of Paragraph 26.02. Document will be given the status of "Filed as Received" and no further action is required on that Record Data.
    - 2. Reject the Record Data for one of the following reasons:
      - a. The document submittal requirements of the Contract Documents indicate that the document submitted as Record Data should have been submitted as a Shop

- Drawing. The Record Data will be marked "Rejected" and "Submit Shop Drawing." No further action is required on this document as Record Data and the Record Data process will be closed. Resubmit the document as a Shop Drawing per Article 25.
- b. The cursory review indicates that the document does not meet the requirements of Paragraph 26.02. The Record Data will be marked "Rejected" and "Revise and Resubmit." Contractor is to resubmit the Record Data until it is acceptable and marked "Filed as Received." When Record Data is filed, no further action is required and the Record Data process will be closed.
- The Record Data is not required by the Contract Documents nor is the Record Data applicable to the Project. The Record Data will be marked "Rejected" and "Cancel Not Required." No further action is required and the Record Data process will be closed.
- C. Contractor is to resubmit the Record Data until it is acceptable and marked "Filed as Received."

## **ARTICLE 27 – CONSTRUCTION PROGRESS SCHEDULE**

#### ARTICLE 28 – VIDEO AND PHOTOGRAPHIC DOCUMENTATION

#### **ARTICLE 29 – EXECUTION AND CLOSEOUT**

## 29.01 Substantial Completion

- A. Notify the <u>Designer</u> that the Work or a designated portion of the Work is substantially complete per the General Conditions. Include a list of the items remaining to be completed or corrected before the Project will be considered to be complete.
- B. OPT will visit the Site to observe the Work within a reasonable time after notification is received to determine the status of the Project.
- C. <u>Designer</u> will notify the Contractor that the Work is either substantially complete or that additional Work must be performed before the Project will be considered substantially complete.
  - <u>Designer</u> will notify the Contractor of items that must be completed before the Project will be considered substantially complete.
  - 2. Correct the noted deficiencies in the Work.
  - 3. Notify the <u>Designer</u> when the items of Work in the <u>Designer</u>'s notice have been completed.
  - 4. OPT will revisit the Site and repeat the process.
  - <u>Designer</u> will issue a Certificate of Substantial Completion to the Contractor when the OPT considers the Project to be substantially complete. The Certificate will include a tentative list of items to be corrected before Final Payment will be recommended.
  - 6. Review the list and notify the <u>Designer</u> of any objections to items on the list within 10 days after receiving the Certificate of Substantial Completion.

## 29.02 Final Inspections

- A. Notify the **Designer** when:
  - 1. Work has been completed in compliance with the Contract Documents;
  - 2. Equipment and systems have been tested per Contract Documents and are fully operational;
  - 3. Final Operations and Maintenance Manuals have been provided to the Owner and all operator training has been completed;
  - 4. Specified spare parts and special tools have been provided; and
  - 5. Work is complete and ready for final inspection.
- B. OPT will visit the Site to determine if the Project is complete and ready for Final Payment within a reasonable time after the notice is received.
- C. <u>Designer</u> will notify the Contractor that the Project is complete or will notify the Contractor that Work is Defective.
- D. Take immediate steps to correct Defective Work. Notify the <u>Designer</u> when Defective Work has corrected. OPT will visit the Site to determine if the Project is complete and the Work is acceptable. <u>Designer</u> will notify the Contractor that the Project is complete or will notify the Contractor that Work is Defective.
- E. Submit the Request for Final Payment with the closeout documents described in Paragraph 29.06 if notified that the Project is complete and the Work is acceptable.

**ARTICLE 30 – MISCELLANEOUS** 

**END OF SECTION**